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ACTIVITIES FOR DEVELOPING PSYCHOLINGUISTIC SKILLS WITH PRESCHOOL CULTURALLY DISADVANTAGED CHILDREN.

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Intended as a guide, not as a curriculum, the manual presents activities designed to improve communication and information processing skills in culturally disadvantaged preschool children, as well as to ameliorate deficits. Generally following the Illinois Test of Psycholinguistic Abilities, except for a section on visual closure derived from Wepman, the manual is divided into 10 areas of communication processes: auditory decoding, visual decoding, auditory vocal association, visual-motor association, vocal encoding, motor encoding, auditory-vocal automatic, auditory-vocal sequential, visual-motor sequential, and visual closure. For each of the 10 areas, activities are suggested, such as games, puzzles, drawings, musical adaptations, art projects, or dramatics. Explanations for use and diagrams are provided. Commercially manufactured items for each area are listed with source of supply. (JB)

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Foreword

This manual presents suggested activities for promoting the acquisition of improved skills of communication and processing information as well as the amelioration of deficits of four-year-old culturally disadvantaged children in ten areas of psycholinguistic abilities or communication processes. These processes are largely derived from the Osgood (1957) clinical model and generally form the basis upon which the Illinois Test of Psycholinguistic Abilities (ITPA) was constructed. The test of memory, however, is derived from the Wepman Model (Wepman, Jones, Bock, and Pelt, 1960).

Visual closure is included in this manual as one of the ten communication processes although it is not measured by the experimental edition of the ITPA.

The ITPA is useful in delineating strengths and weaknesses of a child in nine psycholinguistic abilities. The five major processes that make up the language model are essentially (1) understanding (decoding), (2) determining relationships (association), (3) closure (integration), (4) expressing ideas (encoding), and (5) memory.

Specifically the ITPA is made up of the following nine subtests:

The Auditory Decoding Test assesses how well the child understands spoken language.

The Visual Decoding Test measures how well a child can understand what he sees.

The Auditory Vocal Association Test determines how well the child can relate elements of spoken language and respond vocally with the appropriate answer.

The Visual-Motor Association Test taps the child's ability to relate symbols presented through visual channels.

The Vocal Encoding Test determines how well the child can express himself vocally regarding objects which he sees and holds.

The Motor Encoding Test assesses how well the child can express himself with gestures or motorically.

The Auditory-Vocal Automatic Test measures how well the child has mastered the elementary grammatical and syntactical construction of language.

The Auditory-Vocal Sequential Test assesses the child's auditory memory.

The Visual Motor Sequential Test measures the child's sequential visual memory.

Language is acquired through the auditory and visual channels and, in turn, is expressed through the vocal or motor channels. A diagnostic profile plotting the language age of the child on the nine subtests of the ITPA provide the teacher with a remediation model that helps him become more acutely aware the language processes and reveals areas that need to be stressed to help the child ameliorate possible deficits. It also helps the teacher map out appropriate activities that will elicit responses or processes that need to be develope Likewise, it enables the teacher to identify the strongest language processes h may use to strengthen the weak areas. In addition, the model encourages the teacher to continuously evaluate the child's strengths and weaknesses in the language processes and develop a curriculum accordingly.

The curriculum for four-year-old culturally disadvantaged children in the highly structured program of a research project directed by Karnes (1965-), for which these activities were designed, is tailor-made to fit the individual chil unique needs as they relate to his specific deficits. It is one that promotes basic communication processes as well as knowledge in the areas of mathematics, language arts, social studies and science. The basic processes that are given high priority in the curriculum are those of communication, since this is often the area of greatest weakness. Presenting the materials through varied contexts is felt not only to promote more effective and refined use of the psycholinguistic processes, but also to facilitate the learning of content materials essential for developing a broad cognitive base upon which future learning can be built.*

The purpose of this manual is to help teachers of disadvantaged children become thoroughly familiar with certain types of activities that are believed to promote the further development of and amelioration of psycholinguistic abilities. This manual is a guide not a curriculum for four-year-old culturally disadvantaged children. It does not attempt to delineate the content of the curriculum.

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* The ratio of teachers to pupils in the Karnes' Project is 1 to 5.

Acknowledgements

The activities included in this manual are designed to promote the acquisition of improved skills of communication and the processing of information as well as the amelioration of deficits as delineated by the Illinois Test of Psycholinguistic Abilities. The manual was developed as a part of the course requirement of a curriculum workshop on culturally disadvantaged children at the University of Illinois Department of Special Education in the fall of 1965

The instructor wishes to acknowledge the contribution of the following teachers who designed the activities included in this manual: Audrey Hodgins, Constance Solberg, Laurel Hertig, Jeanne Morris, Carolyn Lorenz, and Margaret Heggemeier.* She also wishes to express appreciation to William Studle School Psychologist in the Champaign Community IV Schools, for presenting a demonstration which involved administering the ITPA to a young child so that the participants in the workshop would have a better understanding of this diagnostic tool and how the specific psycholinguistic strengths and weaknesses of the child can be delineated and how these findings can serve as the basis for a remedial program.

Special appreciation is extended to Douglas Wiseman, Research Associate of the Institute for Research on Exceptional Children, University of Illinois, for sharing with the group, in two workshop sessions, his experiences in using the findings of the ITPA as a basis for developing a remediation program designed to help children overcome deficits.

An attempt has been made to categorize activities under ten headings referred to as communication processes. In assessing or diagnosing strengths and weaknesses of various psycholinguistic skills, each subtest attempts to tap the processes it purports to measure. When the teacher remediates, however, he makes use of a child's strengths to ameliorate his weaknesses. Therefore, a number of communication processes may be involved simultaneously. In reviewing the activities in this manual, the reader may not always agree that a particular suggested activity is appropriately categorized. This categorization, however, can be interpreted as representing agreement among those responsible for developing this manual. These or similar activities have been used in a resea project and have been found to produce statistically significant gains on pre- and post ITPA results when used with four-year-old culturally disadvantaged children (Karnes, Wollersheim, and Stoneburner, 1966). Significant difference in favor of the experimental group were also found in certain psycholinguistic areas when the experimental children's progress was evaluated with that of a comparison group who were provided with a regular nursery school program.

Special thanks are extended to Samuel A. Kirk and James J. McCarthy for the construction of the Illinois Test of Psycholinguistic Abilities (1961) which provides a tool that makes it possible to assess the various psycholinguistic abilities so that a remediation program can be developed by the teacher. The findings of the ITPA now enable the teacher to map out more precisely a structured program for each individual child rather than to rely on a "shot gun" or incidental approach that may hit or miss his specific weakness.

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CONTENTS

Page

Foreward i

Acknowledgements iv

Chapter

I. Auditory Decoding 1

II. Visual Decoding 14

III. Auditory Vocal Association 28

IV. Visual Motor Association 39

V. Vocal Encoding 52

VI. Motor Encoding 59

VII. Auditory Vocal Automatic 70

VIII. Auditory Vocal Sequential 81

IX. Visual Motor Sequential 88

X. Visual Closure 97

Chapter I

AUDITORY DECODING

A. Following Verbal Directions

B. Questions Which Can Be Answered with Minimal Verbal Encoding

C. Auditory Discrimination

I. AUDITORY DECODING

A. Activities Concerned with Following Directions (requiring the least amount of verbal encoding)

1. Simple Directions. Demonstrate First If Necessary

   a) Use of body parts. Start with singular only. Later try plural and later still, mix singular and plural randomly:

   Touch your ear (eye, nose, head ...)

   Touch your ears (eyes, knees, toes ...)

   b) Music format. This may be done to music (Put Your Finger in the Air).

   c) Self introductions. Introduce the children individually to themselves in a full length mirror. "That is Gary Peel...say 'Hello, Gary.' Hold out your hand to the boy in the mirror. What is he doing? Try putting your hand on your head, on your shoulder, touch your nose. Does he do everything you do?" Etc.

2. Use More Difficult Directions Which Involve Other Concepts (Color, Direction, Number, Etc.)

   a) Do as I say. A caller (usually the teacher at first) lines the children up. "This morning, boys and girls, I will see how well you can follow directions. Listen carefully and do just what my sentence tells you. I might ask all of you to do the same thing OR I may call just one name."

   ALL: Stand on one foot behind your chair (in front of, on...)

   JOHN: Bring me a book, a piece of chalk, and a pencil.

   ALL: Jump three times and then clap your hands.

   SUE: Put a yellow sheet of paper between two red books.

   ALL: Stretch up high, touch your toes, and turn around two times. Etc.

b) "Hidden" or whispered directions.

1) Messenger boy. One child is chosen to be the messenger boy. The teacher whispers a "message" to him and he chooses a child to receive the message. The messenger boy then whispers the message to this child. Sample messages: "Take off one shoe." "Turn around three times." "Stand on one foot." etc. The child who receives the message acts out the request. The other children then guess out loud what they thought the message was. When the children master the game, they can make up their own messages and the teacher will not be needed. (Auditory decoding, motor encoding, visual decoding.)

2) A mix-up story. Tell your group, "I'm going to tell you a story, but you have to listen very closely because every once in a while, I'm going to ask one of you to do something. Like this: The bird was singing in the tree and 'Tony, touch your nose.' Are you ready? Once there was a little boy named Henry. One day his mother said, 'Gary stand up.'...No, sit down. I mean Henry. Now, Henry, listen to what I tell you. 'Smile, Darlene, smile.' I need a loaf of bread from the store and I want you to go to the store for me. 'Gloria, scratch your ear.' Here is 25¢. Be sure to ..'Raise your hand, Maria' bring back the change. Henry was a very careful boy and he did just what his mother asked him to. But on the way home he saw a friend and said, 'Tony, clap your hands.'... 'Hi, Joe.' While they were talking, he dropped the money, but Joe helped him find it and away he went, taking the bread and money home to his mother."

c) Directional games

1) Chin, chin, chin. The children sit in a group with the teacher facing them. The teacher starts the game by pointing to her chin and saying, "Chin, chin, chin," and then suddenly switching and pointing to another feature such as her eye but continuing to say, "chin." The children must point to what the teacher says and not to what she points.

2) Simon says. The teacher begins as Simon and gives orders, "Simon says, 'Thumbs up.' Simon says, 'Thumbs down.'" The children follow the directions, If the teacher gives a direction without starting with "Simon says," the children are not supposed to follow the command. When the children have mastered the game, the first child to make a mistake may take the teacher's place as Simon.

3) Silly relay. The children are divided into three or four groups so that more children may participate at a time. Everyday items are placed in a line ahead of the relay rows. (Examples: a chair, a hat, a mitten, an eraser, etc., depending upon the complexity of the game.) The first child in each row is given a command series, "Sit on the chair. Put on the cap. Take off the cap. Jump over the mitten." After he completes the series he runs back to his team, taps the next player in line, and goes to the end of the line. The second in line is given a different command series which has to do with the same line of objects. "Walk around the chair; jump over the cap; put on the mitten; take off the mitten." etc., until each child has had an opportunity to perform a command series.

4) I say. The teacher begins as the captain and faces the children. The teacher gives the commands and when they fit his action, the children must follow. For example, the captain says, "I say, touch your feet," and touches his feet. The children must do the same. However, if the captain says, "I say, bend over," and he raises his arms in the air, the children must remain still and not follow the command.

3. Directions Involved in Activities, Use of Materials, Etc

a) Paper folding. A large piece of construction paper or newsprint can be divided into work areas by means of the folding marks. The teacher says, "Pick up one edge of the paper and bring it over to the other edge. Hold it there while you press the paper flat with your other hand. Good. Now, take another edge (that you haven't used) and bring it over to its other side and then press it flat. Has everyone done that? Now, unfold the paper. You can see four rectangles. We will use each space for these designs." (Geometric shapes have been precut. The children are now directed to select certain colored shapes and assemble them in such a way as to have an ice cream cone, a clown, balloons, etc.)

b) Decorating Christmas cookies. After tree-shaped cookies have been frosted green by the children, the decorations to be used are placed on the tables in appropriate containers. Without decorating a tree herself, the teacher gives instructions. "Put a silver dot on the top point of the tree. This will be a star for the top of your tree. Put a red cinnamon dot at the end of each branch. How many dots do you need? Put three chocolate chips on the base of your tree. This will make the stand." (An interesting sidelight here is to decorate a second cookie by example only. The teacher decorates a cookie in a certain way. With no explanations she merely places her sample before the children and says, "Decorate your cookie just like mine." This would provide an interesting comparison in auditory and visual decoding.)

c) Easel and Listening Games, (by Mary F. Merwin. Acadia Press, Inc., 1144 South Main Avenue, Scranton 4, Pennsylvania. Also available from Teachers Publishing Corporation, Darion, Connecticut, 16820.) This set includes thirty-two easel games which are printed on a large format and are suitable for use before a number of children as a group activity and fifty-two listening games which are printed on an 8½" x 11" format and are completed by an individual child. In many instances, a lesson which was performed by the group at the easel is subsequently re-done in a smaller format by each child at his desk. Example: "Hold up your red crayon. Keep your red crayon and color one truck red, any one." (Continue until all trucks and then all cars have been colored different colors.) "Touch your red truck. That one must stop. Color the light in front of that truck red. The red light is at the top." Etc.

d) Frostig Visual Perception Program, (Follett Publishing Company, Chicago, Illinois.) Although the major emphasis of these exercises would be in the visual and motor areas (visual decoding, visual closure, visual-motor association, visual-motor sequential), it is important to note that the directions are most often given orally by the teacher. Therefore, auditory decoding is a requisite skill for successful completion of the series.

B. Questions Which Can Be Answered with Minimal Verbal Encoding

1. Yes-No-Maybe-Type Questions General instructions: "This morning I am going to read some sentences to you. Listen carefully to the sentence and answer it with either yes, no, or maybe."

   a) Concerned with body image:

      1. Our feet are on the ends of our arms.
      2. You have one head.
      3. Your arm does not bend.
      4. We are sitting down.

   b) Concerned with the immediate environment:

      1. The light is on.
      2. The floor is moving.
      3. We can pick up chairs.

   c) Concerned with familiar classes or concepts (fruits, animals, colors, seasons, number, weather, properties of objects, etc.):

      1. Grapes grow in bunches
      2. Bananas are round.

      3. A triangle has four sides.
      4. Horses, cows, and ducks are four-legged animals.
      5. A fish can walk.

      6. An ice-cream cone is hot.
      7. Bobby is the name of a boy.
      8. Is mud good to eat?

      9. Acorns grow on maple trees.
      10. Leaves turn red and yellow in the fall.
      11. All apples are red.
      12. People turn off their furnaces in the fall.

2. Questions of Identification.

   a) Recall of items in sentences, short stories, etc. For instance, the teacher says, "This morning I shall read some very short stories. Be a good listener. When I finish a story, I shall ask you some questions. If you can answer the questions, then you are a good listener. Ready?"

1) We have fun in the spring. We jump rope. We play marbles and fly kites.

   What time of the year is it? Name three games we play in the spring.

2) Today it is raining. We wear our raincoats and hats. Our boots splash in the puddles. We like the spring rain.

   What kind of weather did I mention in the story? What kind of clothes do we wear when it rains?

3) I am a baby bird. I live in a nest. I am learning to fly. When I am big, I can sing.

   Where did the baby bird live? What was it learning.to do? What will it do when it is a grown up bird? Etc.

4) Tell a short story. Tell a story in which children have to remember the specific colors of objects:

   > There was once a boy named Jack. Jack lived in a white house with his mother and father. One day Jack's father brought a dog home for Jack. The dog was brown. One day Jack forgot to shut the big green door and the dog ran away.

   What was the color of Jack's house? What color was the dog?..What color was the big door?

b) Providing appropriate animal sounds or actions.

   1) Animal story. The teacher selects a story that includes the names of familiar animals and that entails a good deal of repetition of these names. (The Little Red Hen is an example.) After the children are seated and ready to listen, the teacher gives each of them the name of an animal that is in the story and tells them how to "talk" like that animal. Whenever his animal is mentioned in the story, the child must

make the sound of the animal.

2) Animal Talk. (A game by Mattel, Inc., Hawthorne, California) The red barn with its pull ring produces the sounds of twelve farm animals in a random order. When the ring is pulled, the child would respond vocally with the name of the animal which makes that sound. Although the auditory aspect of this game would remain a constant, the response could be changed. A visual response could be required by having the child choose a picture of the correct animal. A motor response could be required by having the child act like the animal whose sound he had heard. A more difficult associative response could be required by having the child choose a related picture, such as a bottle of milk to go with the sound of a cow, a saddle to go with the sound of a horse, an egg to go with the sound of a chicken, etc.

c) Word omission. The teacher should develop the habit of omitting words which either picture clues or the logic of the material will enable the children to supply. Example: Story Time. Peter Johnson and His Guitar. These questions can be asked after the first reading of the book or--if the children are familiar with the story--during a reading of the story. The illustrations would help provide the answers.

Peter looked in the _____ (barn).
He looked under the _____ (table).
He looked behind the ____ (door).
In the yard he met a ____ (cat). Etc.

d) Detection and correction of incorrect or nonsensical items.

1) Change my sentence. "Today I am going to say some sentences with wrong or silly words in them. Listen to the sentence and if you can change it into a sentence that makes sense, raise your hand.

Water is dry.
A nail has a tail.
An ax is an animal.
Cows have four wings.
Jane is the name of a boy.
An apple is square.
Ice is warm.
A pig can fly."Etc.

2) Something about you. The teacher explains, "I'm going to tell you a silly story about yourselves. Listen very carefully and when you hear something silly, put your hand up.

Once upon a time, five children came to school. Their names were Debbie, Tony etc. They were all boys and they were all fifty years old. Their teacher was an old man named Grumpy. Every day the children rode to school on a horse. When they got to school, they put on their p.j.'s and went to bed. When they woke up, they had supper. Then they drew books on the ceiling and took them home. When school was over, a fire engine came to get them."

3) What's wrong here? The teacher says, "I am going to read you a story that has some mistakes or is funny. Odd things happen. If you hear something that doesn't sound right, raise your hand, and when the teacher calls on you, tell us what is wrong with the story.

Once there was a farm right in the middle of town...(If no one raises a hand, ask, 'Does anyone know what is wrong with that? Farms are in the country, aren't they?... Not in the middle of a town or a city.') So now I'll read that the right way....Once there was a farm out in the country. The farmer and his wife had two children--two girls and a boy. The farmer raised cows, horses, sheep, goats, turkeys, chickens, and pigs on the farm.

One winter day when it was snowing outdoors, the farmer told his boy to put on his swimming suit and go out to feed the horses. When Jimmy reached the barn and opened the door, he could hear the horses calling him -- 'Moo, Moo.' 'They must be very hungry,' thought Jimmy as he rushed over to their stalls. He gave them some hay to eat. He also fed the other animals. Then he thought, 'I'll check the chickens' nests and see if they have laid any buttons because I sure do like fried buttons for breakfast.

> Jimmy's father came out to the barn and they began to milk the pigs. After the milking was done, Jimmy and his father could go into the house and have their own breakfast. Jimmy always had green milk for breakfast."

e) **Riddle or rhyme format.** Although there are many inexpensive and suitable books of riddles (What Am I?, Golden Press, New York, 35¢; Riddles, Riddles, from A to Z, Golden Press, New York, 35¢, to list only two), the teacher can more effectively use original riddles which relate directly to the subject matter being taught

   1) Riddle of class. "I am thinking of a fruit that has a smooth skin. It has a single stone or seed in the center. It is juicy. It grows on a tree. It is purple." etc. until children guess "plum." Example: "I am thinking of a shape that we often see in buildings. It could be the shape of a brick. It could be the shape of a cement block. It has four sides. The four sides are not all the same length." etc. until children guess "rectangle." Similar riddles can be made for colors, animals, items of clothing and furniture, etc.

   2) I see something. The teacher says, "I see something. It is in this room. It is red and it is on the little table. It is a square." Then she calls on a child to tell what it is. (A book.) This can be done with any object in the room. As the children increase in skill, objects which are very familiar but are not actually present can be used. For example, "I am thinking of something. It has four legs, a tail, and it barks. What is it?"

   3) Find my child. A child or teacher plays the part of the mother and one of the children is chosen to be a policeman. The mother tells the policeman that her child is lost and asks him if he will help her find him. The policeman asks if the child is a little boy or girl and what he was wearing when he disappeared. The mother tells the policeman about the clothes. The policeman walks about the room as the clothing is described. When he picks out the child that has on this clothing, he returns him to the mother and another

player becomes the policeman. (Auditory decoding, visual decoding, vocal encoding.)

4) Which pictures rhyme? "Can you think of two words that rhyme? Good. Coat and boat rhyme. Pie and tie rhyme. I'll give you a worksheet with some pictures on it. Each picture has a rhyming partner. Find the partner and color it the same color. Don't use the same crayon for more than two pictures." (Pictures: hat-cat; spoon-moon; pen-hen; car-star.)

For younger children or low groups, it would be better to start with the Instructo Kindergarten Rhymes and Rhyming Pictures. There are available from Instructo, Division of Jacronda Mfg., Philadelphia, Pa., 3 for $2.50.

3. Use of the Above Activities in Teaching Concepts such as Color, Class, Form, Shape, Etc.

a) Establishing names for colors. Give each child a pile of three paired color chips (red, blue, yellow). Pick up a red one: "We want to find one that is the same... here it is. Now put them together. Good. Now, find one that is the same as this one.....and put them together. Are these two last ones the same?...yes, so put them together. These are colors, and they have names. I will show you red. (Hold it up.) 'RED!' Everyone hold up a red color. Good. Mix up your colors...point to a red one. Good. Say its name. Now I will show you the yellow color....(Hold it up) YELLOW! Everyone hold up a yellow color. Say its name...Mix it up with the other colors. Point to the yellow; point to the red; etc." Repeat until children do not make mistakes. Then add 'blue' the same way.

The next set of color chips contains eight colors and is introduced in the same way.

The color shades consist of five shades of each color. The extremes (light and dark) are introduced first.

b) Establishing a vocabulary for dimensions and practice in discrimination. The materials involved for the concept of thick vs. thin consist of dowels, cans, blocks, books, etc. which vary only in the dimension of thickness. Start with the series of six cans, demonstrating the two extremes at first: "This can is thick...thick; this can is thin...thin: thick(pointing); thin(pointing) They are the same this way (side by side to compare height) but this way (end to end to compare bases) they are different. This one is thick...this one is thin." (Hand out thick and thin dowels.) "Hold up your thick dowel." You will perhaps have to go around and show each child the thick one. "Now say, 'This is the thick dowel.' Put the thick dowel down and hold up the thin dowel. Say: 'This is the thin dowel.'" (Then add a medium thick dowel and demonstrate how one can build a tower with the three--the thickest on the bottom the thinnest on the top.) "Now, you build a tower like this one." (It took three lessons of this nature before the children could begin to do this. After almost two weeks of working with this concept, the children can sometimes build a complete tower with the dowels or cans...or steps or tower with the blocks. But the process apparently is not sufficiently internalized to be reliable yet and the verbalization of the concept has lagged behind.) Next will come the comparative aspects. ("This is thicker than this, but thinner than that.")

Similar materials are used for tall-short and for combining two variables (thick and tall vs. thin and short; thick and short vs. thin and tall).

4. Music or Circle Eormat

Circle activity. As the children arrive at school they should be told where to put coats, etc. and directed to the group. Teacher at group could ask, "Who has just come to school?

Let's say (or sing) good morning to Johnny.
Who can tell us something special about Mary?
Does she have a red dress on today?
Can anyone see a boy with striped socks on? "

C. Auditory Discrimination Involves slightly different skill of detecting nuances of inflection, rhythm, tone, or loudness.

1. Loudness

Find the clock. The teacher hides a ticking clock while the children close their eyes. (Suitable for only a small group of children, five or six.) The children move about the room quietly to find the clock, aided in their search by the ticking. The finder of the clock becomes the child to hide the clock for the second game.

2. Rhythm

a) Imitation by body movement. Have the children walk to music. When the music plays slowly, they should move slowly; as it speeds up, so should they. This type of activity should begin with a drum. Each time the teacher beats it, the children should take a step. Thus, at first, it will be very slow and even. Later, the beat should be faster, and the children should be running. After the drum, the piano can be used with just chords. Finally, musical pieces of increasing complexity can be introduced as the children gain the ability of interpreting tempo in music into a corresponding tempo in movement.

b) Rhythm instruments. Children reproduce rhythmic patterns of increasing complexity on a variety of simple rhythm instruments. (Hand clapping may be used at first, but the rhythm instruments provide better motivation and a more precise result.) Sample rhythms: /
1-2-3-4
/   /
1-2-3-4
/ ∪ / ∪
1-2-3-4

Variations are taught with combinations of loud-soft or of skipped beats. Similar variations may be introduced with a 1-2-3 rhythm. When the children are able to maintain the rhythm, a piano melody may be superimposed.

3. Tone

a) Music-listening activity. "My fingers can walk up the piano. (Play the scale.) Can you hear them? Now what happened?" (Slide down scale.)

Play scale slowly. "Am I walking or running? Am I going up or down?" etc.

b) Resonator bells. (Creative Playthings, Inc., Princeton, New Jersey) Each bell is mounted on a separate block and comes with its own mallet and can be used individually. These eight bells present the diatonic scale Middle C to C.

Initially a child would be presented with only two bells and asked to select the higher and lower sound. As his acuity in auditory discrimination developed, the number of bells would be increased. Ideally, a child would be able to arrange the eight in order of a chromatic scale, but such a performance would not be required of all children. Skill in arranging four or five bells could be considered an adequate performance. The idea of the same sound or like sounds and different sounds would also be taught.

4. Identifying Classroom Sounds

Tapes. Make a tape recording of various classroom sounds such as the piano, drum, door shutting, children clapping, someone walking, water running, a teacher talking, etc. Leave a space after each for time for identification. Then play it to a small group of children. "Listen closely to the sounds. If you know what any of them are, raise your hand. For instance, close your eyes and tell me what this sound is. (Draw a chair on the floor.) All right, open your eyes. What was it?" If the children have the idea, start the tape. If they don't, try another sample.

Chapter II

VISUAL DECODING

A. Basic Visual Discrimination
B. Identification of Objects Through Visual Clues
C. Identification of Concepts
D. Explaining Significance of Action Pictures
E. Interpretation of Actions

II. VISUAL DECODING

A. Basic Visual Discrimination

1. Matching Games

a) Perception Plaques. (Creative Playthings, Inc. Princeton New Jersey, 18540.) Twelve pairs of plywood plaques have designs that appear similar, but actually embody slight differences which the child must detect. Two or more children can play with the plaques as a game to see who matches the most pairs. Equally useful for solitary play. Plaques are 2 3/8" square.

A389 Perception Faces (Differences in facial features)	$2.75
A390 Perception Clowns (Differences in body features)	$2.75

b) Jollytime Dominoes. Picture dominoes teach how to match things that are alike. Older children can play regular dominoes located on reverse side of picture dominoes. Contains full set of 28 dominoes.
No. 4517 $1.00

c) Forest Friends. (Milton Bradley Co., Springfield, Massachusetts, 01101.) Players match pictures of animals on the big spinner, with duplicate pictures on the game board. Object is to be first to reach the end of the Forest Path. Contains: folding playing board 16¼" x 16¼"; jumbo-size spinner showing Forest Friends; 4 plastic playing pieces.
No. 4808 $1.00

d) Picture Readiness Game. (Gerrard Publishing Co., Champaign, Illinois. $1.25, From the Dolch Materials. This game is played in a lotto-like manner. The matc which is made is an exact one, although there are some classifying factors since the cards are devoted to categories. (A card picturing six fruits, for instance.)

e) Spots and Stripes. (Arrco Playing Card Co., Chicago, Illinois, 29¢.) This is an inexpensive, attractively produced game which is played in a fashion similar to dominoes. If a player is unable to match the required number of spots or stripes he may use a wild card -- a tiger or zebra, for the needed stripes, a leopard or a giraffe for the needed spots, if he is lucky enough to draw a wild card.

f) Candy Land. (Milton Bradley Co., Springfield, Massachusetts, 01101.) No reading or arithmetic required to play this game. The child draws a card and moves his playing piece to the corresponding color or object square on the game board. Suitable for nursery, kindergarten, and primary grades.
Deluxe Edition No. 4403 $3.00

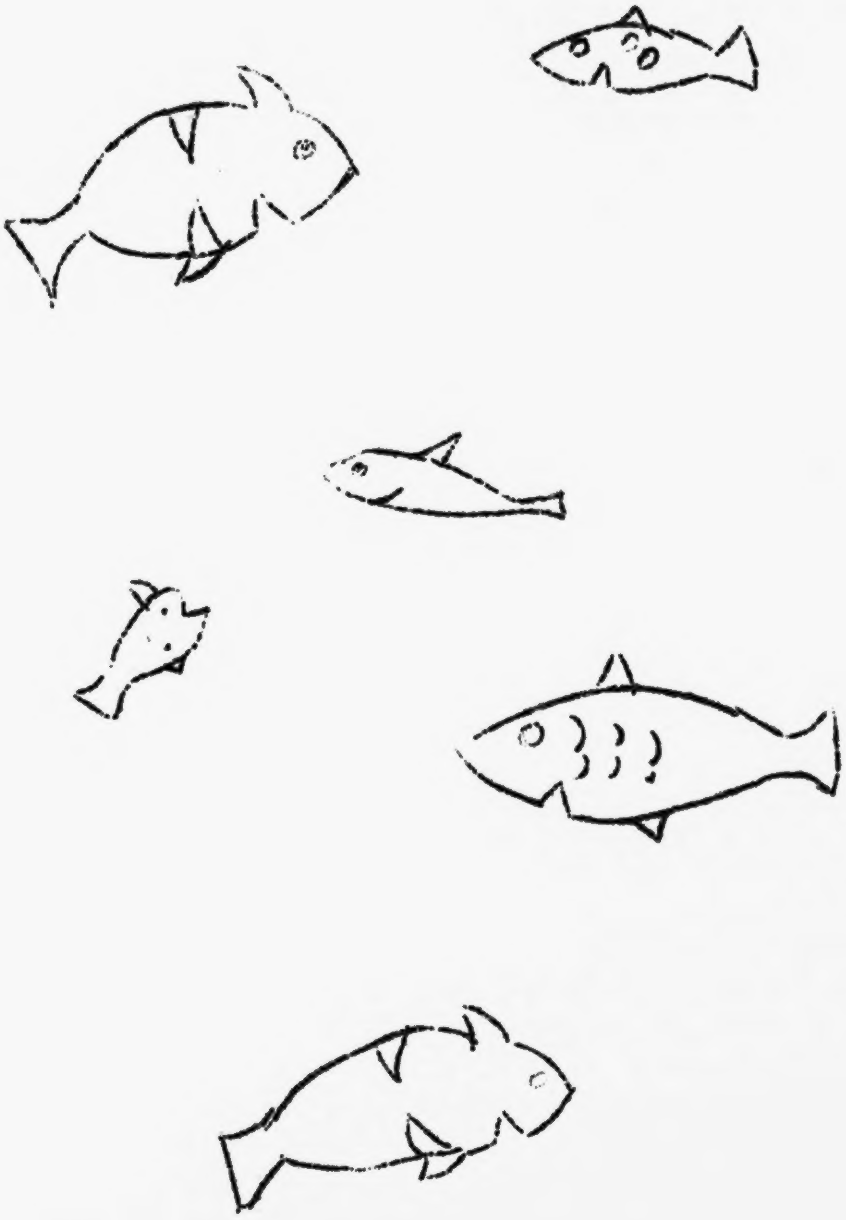
g) Chicken Lotto. A color lotto game. Players press down on the chicken's tail and she lays a colored egg which is then placed on a matching color square on the lotto card. Available at Penney's stores.
X923-4550A $2.22

h) Nature Flash Cards. Educational Games and Aids Division, 330 W. 42nd Street, New York, New York, 10036. Six titles.
Size 3x6 " $1.00

i) Nature Card Games. Creative Playthings, Inc., Princeton, New Jersey, 08540. Birds, flowers, and animal material edited by Roger Tory Peterson.
Set of 3 S775 (8 oz.) $3.00

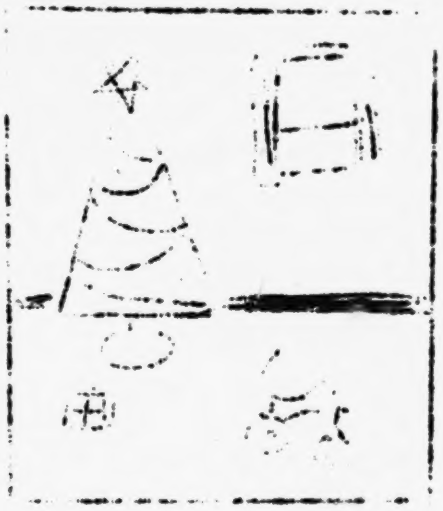
Cards similar to those listed above are purchased in sets of two. Initially a child matches identical pictures; one grasshopper and another grasshopper, one beetle and another beetle, one robin and another robin, one cardinal and another cardinal. Later subject matter may be mixed and the child would sort out all the insects, all the birds, etc., depending upon the collection. The McGraw Hill collection is particularly well done with excellent realistic pictures and a large size (3"x6") which is easy for the children to see and handle.

j) Finding identical objects. Find the identical objects in a confusing array of objects. See sample below. (Find the two fish that are alike.)



2. Sorting Simple Objects and Pictures

a) Puzzles. These could be designed with familiar geometric shapes used as the major shape of the items. For example:



The puzzle would be presented to the child: "Take out all the triangles you can find."

"Take out all the squares you can find and put them in a pile."

"Take out all the circles you can find and put them in another pile."

b) Object sorting. Muffin pans, egg cartons, small plastic containers, or small aluminum pie pans make excellent containers for sorting activities. Dried seeds in a large container make an excellent sorting activity. The assortment could contain kidney beans, lima beans, calico beans, northern beans, pop corn (unpopped). Pins (safety), nails, and screws of different sizes may also be sorted. Buttons may be sorted by size and color. Wooden beads may be sorted by shape and color. Sorting may be made more complicated for the advanced child by requiring that he put one bead (or whatever is being sorted) in the first muffin cup, two in the second, etc. up to twelve.

c) Wildlife Old Maid. (National Wildlife Federation, 1412 16th Street, N.W., Washington, D.C., 20036.) This game may be played at first as a simple sorting game by one or more children. When the children have become familiar with the cards and understand the principle of likeness, they may play a traditional form of Old Maid with the cards. The quality of illustration makes these cards far superior to the ordinary Old Maid purchased in the dime store. The fish, birds, and other animals pictured on these cards are more useful for classroom purposes than the usual comic characters.

3. Copying Designs

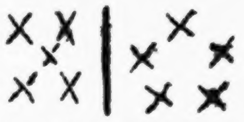
a) Geometric shape and color. Draw three circles of the same size. Color one red, one green, and one yellow. Have children duplicate.

b) Bead stringing. Give each child beads and a lace. Tell the group to make patterned necklaces, red, yellow, blue, "Just like mine." Can they copy the pattern?

c) Place setting. Make a model place setting, mat, plate, fork and spoon. Give each child necessary item and tell them to "Set your table like mine." The teacher can increase the difficulty of the activity by having each child set a place opposite hers or by having each child set two places opposite each other. Can the child 'reverse'?

d) Other designs. Make a simple design with four colored candies, red, green, red, yellow. Present child with several candies to choose from. Can he make the same pattern under the teacher's?

Make a simple figure with five candies or beads. Give the child the exact number of items he needs to copy it. Can he reproduce the figure?



As above, but give the child more items than he needs to copy the pattern. Does he copy the pattern one for one, or does he reproduce the pattern but use all his beads or candies?

e) One-to-one matching of designs. Present a line of objects, five small pieces of paper widely spaced, Tell the child to put out one crayon for each piece of paper. Bunch the crayons together so they make a much shorter line than the pieces of paper. Ask him if he still has a crayon for each piece of paper. Can he prove his answer if he says, "Yes," by putting a crayon on each piece of paper?

B. Identification of Objects through Visual Clues

1. Present Real Objects First When a real object is used, children will be able to employ different senses in becoming acquainted with the object and be able to use all the clues for identification.

The progressive sequence for abstraction would proceed something like this:

- Examination of actual fruit.
- Identification of a realistic picture of fruit, a simple picture without other elements.
- Identification of a colored silhouette, realistic color is used.

Identification of a naturalistically colored silhouette of the fruit which is mounted on black paper and folded down the center. The child identifies the fruit from the half-silhouette and then unfolds the silhouette to check his response. (This is actually a visual closure activity, but it fits logically in this progression.)

e) Identification of a black silhouette of the fruit without a color clue.

Identification of the fruit from a dotted outline only. These may be mimeographed if the children are to follow the dots with a pencil. However, these shapes may be identified without the actual lines drawn in. (Again, this is more properly a visual closure activity.)

Identification of the fruit in a picture which has other distracting elements or where the fruit is in a slightly changed form. (Cherries in a cherry pie, grapes in a bowl of assorted fruit, lemons cut into wedges, strawberries in strawberry shortcake, etc.)

a) "Tell us." Have a box with a sock, hat, fork, a pair of glasses, a pencil, a comb, etc. "We will pass the box around. Each of you take out one item or thing and then tell us what it is. Now I'm going to pass around another box with pictures in it. Find the picture that has the same thing on it as you just picked out of the other box."

b) "I see." The teacher says, "I see a ________" and points to an object. The children tell her what the name of the object is. Soon, they may be able to say the name of the object and its color or what it is made out of. They may say, "I see a pink chair" or "I see a wooden pencil."

c) "Pick out." Put a collection of objects in the center of the table. Ask the children to pick the right one. At this age, children might find it impossible to "act out" in front of the group. The above suggestion accomplishes or strengthens the visual skill.

tin foil plate	"What's round and shiny?"
knitting needle	"What's long and sharp?"
tooth pick	"What's short and sharp?"
piece of fur	"What's fuzzy?"
bottle opener	"What do you open pop with?"

chalk	"What do you write on the board with?"
pencil	"What do you write on paper with?"
ring	"What do you wear on your finger?"
necklace	"What do you wear around your neck?"

d) Introduction of new materials. This is a good activity when you are introducing new materials. Place all of the needed equipment on the table and have the children take turns pointing to an object and asking others what it is. If no child knows the name of the object, then the teacher must be asked. After she names the object, then a child is asked to identify it.

e) "Seeing" trips. Take a walk around the immediate neighborhood. Tell the children before you leave that they are going to try to see and remember as many things as they can. Choose one child at a time to point out all the thing he sees and name them. The teacher should provide an example; she might say, "I see a tall tree. I see the sidewalk I see the lightpost, I see the dirt." Etc. Encourage the children to see increasingly smaller and less conspicuous objects on subsequent trips. Soon the children should be seeing cracks in the sidewalk.

f) Who's missing? One of the children turns his back to the group and covers his eyes. Another child leaves the room and the other children switch their positions. When "it" turns around and faces the group, he must try to guess who is missing before they count to 10 slowly. The game is repeated with a new "it." (Memory is an important factor here also.)

2. Present Models of Objects. When it is difficult or impossible to present the actual object - such as farm animals or zoo animals to the children first, it might be helpful to show them realistic models - such as those purchased from Creative Playthings.

3. Present Realistic Pictures

a) Wood Lotto. (Creative Playthings, Inc., Princeton, New Jersey, 08540.) Object is to match the small plaques to corresponding pictures on the larger master board. Thirty-six plaques with familiar objects, easily named and identified. Six master boards 4" x 6".

A335 (4 lbs.) $4.95

There are many other useful lotto games on the market, although most of them are not made in so durable a form. Farm lotto, zoo lotto, bird lotto are easily available.

b) The teacher could bring a small flash camera to school and take pictures of the children as they work on various tasks. Later, the pictures can be posted on the bulletin board. Have the children identify themselves in these pictures and have them point out their classmates. They could also tell what they are doing.

c) This is a good activity for Christmas time, but could be used at other times also. Bring a Christmas catalog to school (they have a large number of toys in them) and have each child in turn choose what he wants as presents for Christmas. Have him point to them and say, "a doll, a coloring book, a cowboy suit, a truck." Etc. If the child is reluctant, have him say the items as you point to them.

d) Whenever reading a picture book to the children, the teacher can ask different children what they see on each page before she reads what actually happened on that page. This can also be done by the children as a way of telling the soory themselves without the teacher reading the story. Many picture books have such detailed pictures that if the children describe the pictures on each page, the story becomes quite clear.

4. Partial Representations of Objects

a) Detective. Materials required: a sand table or a plastic dishpan filled with damp sand, a collection of objects with which to make "tracks" -- a cork, a pop bottle cap, a pencil, a cup, small cookie cutters, etc. Children close their eyes and the teacher (or another child) makes "tracks" with one of the objects. Children must then decide which object was used to leave the trail. (This activity could be elaborated upon during storytime with some of the excellent children's books available on animal footprints.)

b) My shadow.. Materials required: child-size pieces of wrapping paper, black dri-mark, crayons. A child-size piece of wrapping paper is spread on the floor. A child lies down on the paper and the teacher traces his outline with the dri-mark, taking care to include details like five fingers, shoe laces, and special identifying outlines such as pigtails. The outline picture is hung on the wall at floor level so that the child may closely compare himself with his outline. Later the child adds with crayons his features and his clothing. The items of clothing should be made to correspond in color with the clothing the child is wearing that day.

C. Identification of Concepts

1. Geometric Shapes.

a) Colored geometric shapes. Use either the commercial masonite ones or make some from colored cardboard. Spread on the table. Ask:

"Which square is blue? Which shape is an oval? Which oval is orange?" Etc.

b) Identification of crackers and napkin shapes. Let the children rotate giving out these at juice time. Each child in turn identifies the shapes as:"Please give me one square cracker on an oval napkin."

2. Color

a) A color game. Have all 5 shades of 6 color bars in a pile in front of the dealer. Explain: "We are going to play a game. I will be dealer first, and when I make a mistake, it will be Gary's turn. Now each choose a color which you will collect... Now you will take turns asking the dealer for your color. The dealer finds that color and gives it to you. If he makes a mistake, the next person is dealer. Are you ready? All right, Gloria, which color do you need?" Etc. (The teacher makes a 'mistake' as soon as the children have learned the routine of the game.)

3. Position

a) Open or closed. Use pictures of items which can be open or shut (refrigerators, stoves, boxes, doors, etc.) Ask the child to pick out those things which are open, those that are closed.

b) Other suggestions might include: Up and down, in or out, in front of or in back of, etc.

4. Number

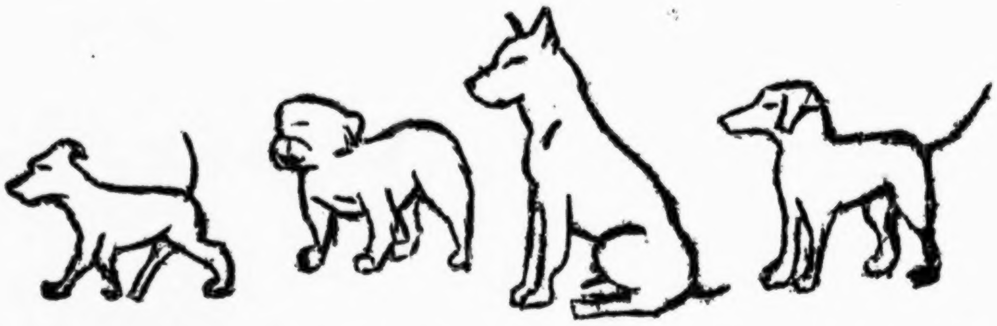
a) Singular and plural. Have pictures of single and multiple items. Have the children select a picture to verbalize:

I see one shoe	or	I see two shoes
I see one foot	or	I see two feet
I see one dog	or	I see three dogs

b) Collect your number. Give each child a number. He must collect the pictures that contain that number of objects. The teacher holds up a picture of two shoes and the child collecting "two", says: "May I have the picture of two shoes?" Etc....

5. Size

a) Size, Numerical order. Each child should have a worksheet with pictures of the four dogs (or other objects.)



"This morning boys and girls, I am going to see how well you can follow directions. Get out your crayons because you will be making marks on the worksheet I will give you. Now, how many dogs do you see? Are they all the same size? Look at the dogs carefully and mark them when I give you the directions, Ready?

1. Put a red X on the biggest dog.
2. Draw a blue line under the smallest dog.
3. Put a green X on the first dog.
4. Draw a brown circle around the third dog.
5. Put a black X on the second dog.
6. Draw three lines under the last dog with your orange crayon."

b) Size and color. Offer two objects identical except for one aspect. (Large and small milk cartons, large and small paper cups, red and green paper cups, etc.) The teacher says: "Tell me why I have these two together........Now tell me how this one is different from that one."

6. Names

a) Place cards. As a preliminary background, each child is helped to print his name on his papers over a period of time. Then each child's name is printed on a piece of cardboard. Before the children sit at the table, the teacher distributes the place cards randomly about the table. The teacher explains: "Look at the name cards and see if you can find yours. Then sit down at that place. If you can't find your name, I will help you."

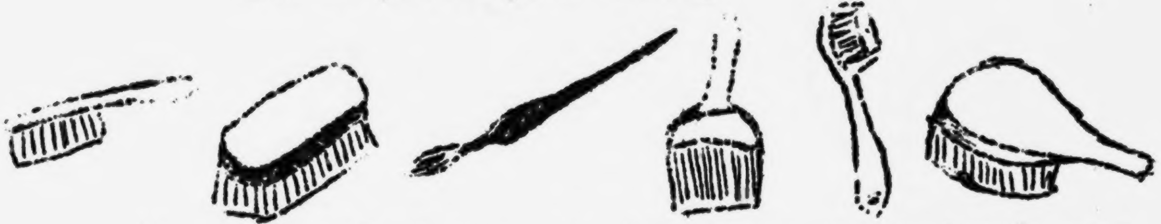
b) Name chart for assigning coat hooks. Make a chart with all the children's names on it and a slot into which the teacher can place a colored shape. Corresponding colored shapes are above the hooks for the children's coats. As each child comes in, the teacher helps him find his name and 'his' colored shape. (A child in a low group might be oriented to finding his name in relation to the top or the bottom of the chart. Help such a child to trace his name with his index finger.) The child then finds the corresponding shape over the hook and hangs his coat there.

Each month the colored shapes should be changed on the name chart so that the child must make a new association and cannot identify his name from the shape.

7. Use

a) Which brush would you use? The teacher says: "I have given you a worksheet with six pictures on it. These pictures are alike in one way and different in other ways. Can you tell me in what way they are alike? Right! They are all brushes. In what way are they different? Good! You mentioned many ways that these brushes are different. Now I will tell you something about each brush. Listen carefully to my directions and mark the brush I am describing. You will need your crayons. Ready?

1) "Put a blue X on the brush you use to brush your hair.
2) Draw a red circle around the brush you use to brush your clothes.
3) Draw two green lines under the brush that is used to polish your shoes.



4) Put a black X on the brush you use to brush your teeth.
5) Put a brown ▲ around the brush you use to paint a picture.
6) Draw a purple circle around the brush that you would use to paint a dog house."

8. Frostig Visual Perception Program Follett Publishing Co., Chicago, Illinois. Although other ITPA areas are involved in completing the Frostig program (auditory decoding, visual motor association and visual-motor sequential, and visual closure), a great deal of the work would exercise the skill of visual decoding.

D. Explaining the Significance of Action Pictures

1. Simple Independent Pictures

a) Simple action. Show a picture of children playing. The teacher says: "Tell me about this picture. What are the children doing? Where are they? How many children are there? Are they boys or girls?" Etc.

b) Simple moods. Use pictures of children with a vivid expression on their faces. The teacher says: "Look at the child in this picture. Do you think he is happy or sad? Why do you think he is feeling that way?"

2. Pictures from Familiar Stories Select pictures from a story the children are familiar with (you might order an extra copy of the book and cut and mount the pictures).

a) The Three Little Pigs. Use or draw a picture of the little pig carrying bricks to make his house. The teacher says: "Here is a picture from a story that you know. Can anyone tell me the name of the story?.... Good. Now tell me what is happening in the picture. What is the little pig carrying? What will he do with them? Etc....

If the picture is a simple mimeographed one so that each child can have a copy, the children can color the picture after the discussion.

3. Detection of Bizarre or Missing Elements

a) What is wrong? Find or draw simple pictures with obvious mistakes (such as a child in a swimming suit playing in the snow; a cat in a fish bowl; an elephant in a tree; a child sitting down to eat at a table which was upside down; etc. The teacher says: "Look at this picture carefully. Do you see anything that is wrong with the picture? Tell me what you think should be changed."

E. Interpretation of Actions

1. Imitation of Activities

a) Touching exercises. Have the children observe, duplicate, and then verbalize the actions.

The teacher touches her head. The children touch their heads and say: "I touch my head."
The teacher touches her eye, etc. ..

b) Making a booklet. The teacher says: "We are going to make a little book. Do just what I do". She gives each of the children a large sheet of paper. "Are you ready?" The teacher folds the paper in half in one direction - the long dimension of the paper. If all the children have followed this far, the teacher then folds the paper again in the same direction. After checking to see if all the children have kept up, she then unfolds the paper and shows the class the four long rectangles which the creases have made. She then hands out scissors. "Now watch where I cut". She the cuts the rectangles apart. Then she stacks the rectangles in an even stack and folds them in half - the short sides go together. After all the children have reached this point, the pages can be stapled in the center crease mark. The book is ready for drawing or pasting work.

2. Pantomimes

a) Animal bingo. The teacher hands out pictures of animals and the same number of buttons to each child. She says, "Gloria will be the first 'caller'. I wil whisper the name of an animal in her ear and she wil then act or move like that animal. If you guess the name of the animal, put a button on that card. When you have three cards with buttons, it will be your turn to be the 'caller'."

b) Where do I go? The class sets up three different areas to be called a 'home', 'farm', or 'zoo'. Each child then goes in front of the other children and acts out some animal. The other children guess what he is. When they guess right, they tell him where t go. If, for example, the child is a 'cow', they sen him to the farm.

c) Nursery rhymes and simple stories. Select a rhyme o short story with which the children are familiar. A teacher can work with her group until they can perfo without any verbal directions. This group performs front of the other groups who then identify the stor or rhyme and which children played which parts.

d) Action songs or finger plays. The teacher first act out a familiar song (such as the Wheels on the Bus) and the children guess. The first child to identify it correctly can then act out one. The teacher shou be prepared to help him with suggestions.

Chapter III

AUDITORY VOCAL ASSOCIATION

A. Activities to Reinforce Associations of Opposites or Dissimilar Qualities

B. Activities to Reinforce Associations of Identical or Similar Qualities

C. Activities to Reinforce Associations of Class and Category

D. Activities to Reinforce Hypothetical or Inferred Associations

III. AUDITORY-VOCAL ASSOCIATION

A. Activities to Reinforce Associations of Opposites or Dissimilar Qualities

1. Opposite Mode of Questioning The teacher uses an opposite or polar format as a mode of questioning or of making observations, regardless of subject matter. For example, assume the subject matter under consideration is fruits. Typical observations made by the teacher might be: (children provide underscored informatio

   A peach has a single seed, but melons have many seeds.

   A melon is large, but a cherry is small.

   The peeling of a pineapple is rough; the peeling of an apple is smooth.

   A tree is tall, a bush is short.

   A strawberry has seeds outside; an apple has seeds inside.

   The ordinary routine of the nursery school provides many opportunities for a teacher to employ such a format. For example:

   When you wash your hands, they're wet; but when you wipe them with a towel, they get dry.

   When you pour juice, your cup is full; but after you drink the juice, your cup is empty.

   If you walk you go slowly, but if you run you go fast.

   If I raise my hand or put it in the air, it's up; but when I put it in my lap, it's down.

2. Opposite Concepts for the Felt Board (Available from Instructo, Division of Jacronda Mfg., Philadelphia 31, Pa. $2.50.) This set includes forty flocked illustrations which can be used with a standard felt board. Although illustrations introduce a visual element, the exercise can be performed with auditory decoding and vocal encoding. The teacher says, "Water made this car clean; mud had made it dirty." The child supplies the missing word and goes on to find the appropriate pair of pictures which he places side by side on the flannel board. In some cases, a visual clue may be necessary before the child can supply

the vocal response. This set includes opposites such as, wet and dry, on and off, tall and short, empty and full, up and down, big and little. The illustrations may be removed from the felt board by presenting a different statement. The child supplies the missing element in the statement, locates the appropriate illustrations, removes them from the felt board, and places them in the storage box. This review (and clean-up) is very useful for helping children who missed responses on the first presentation.

3. Opposite Picture Folders. It is relatively easy to collect magazine pictures which illustrate opposite concepts. These pictures should be reinforced by mounting on construction paper and then sorted into separate folders which are labeled "Open-Shut (Closed)," "Empty-Full," "On-Off," "Few-Many," etc. In the Open-Shut folder we might find a picture of an open door and a closed door, an open window and a closed window, a refrigerator with its door open and a refrigerator with its door closed, an automobile with its door open and an automobile with its door closed, an open book and a closed book. The Few-Many folder might contain pictures of an almost deserted street and a congested street, a tree with only a few leaves and a tree with many leaves, a few blossoms and a field profuse with flowers, a few people and a large crowd. When the teacher presents the auditory statement ("When we drive the car, the door is shut. When we get out of the car, the door is open."), the child supplies the missing element and then finds the appropriate pair of pictures to illustrate the statement. Different statements can be used from day to day which will elicit slightly different responses and maintain interest but which illustrate the same pair of pictures.

4. Big and Little Box. A collection of everyday items which come in two sizes but are alike in all other respects are kept in a large, sturdy box. Examples: large and small bars of Ivory soap, a small baby cereal box and a large baby cereal box, a small box of Jello and a large box of Jello of the same flavor, empty cartons from large and small sizes of toothpaste (same brand), a pocket comb and a regular comb, a standard toothbrush and a child's toothbrush, an empty large vanilla bottle and a small vanilla bottle, a large spoon and a small spoon, a large pin and a small pin, a large button and a small one, etc. These items are identified and paired by the children and the concept of big-little and large-small is reiterated. The comparative forms (-er) are stressed. Although the use of actual items introduces a kinesthetic-visual element, there is ample opportunity for auditory decoding and vocal encodin

There is also excellent opportunity for pointing out q qualities of likeness--both toothbrushes are made of red plastic, but the size is different; both cereal boxes are made of green cardboard, both contained rice cereal, but the size is different.

5. Alike and Different Box A collection of items which have something in common (often their basic use) but which have obvious differences is kept in a large, sturdy box. These items are changed or added to from time to time. Examples: a pinch clothespin and a round clothespin, a plastic fork and a plastic spoon, a drinking glass and a cup, a watch and a clock, a pen and a pencil, a ruler and a tape measure, a mitten and a glove, etc. The presentation may vary. The teacher may begin by asking a child to find two items used for drinking. When the child has found the cup and glass, the teacher asks why they are alike. Then, how are they different. The model for answering must be taught. ("A cup and a glass are alike because......." "A cup has ..... but a glass has ...." "A cup is different from a glass because ....")

6. Special Animals The children are presented with pictures or models of animals which are special in some way. The children are asked to identify something special about the animal they see. (An elephant is special because of his trunk or tusks. A giraffe is special because of the length of his neck or legs or because of his unusual markings. A zebra is special because of his striped pattern. A skunk has a special odor.) Later, it might be possible to do this exercise without visual props.

7. Different Places The teacher selects two places which have obvious differences (city and country, home and school) "Let's find out if home and school are the same or if they are very different. I'll make a list at the board. First, let's think of all the things we do at home....(go to bed, dress, eat, play) All right, now what are some of the things we do at school? (sing songs, work on making designs, learn things, have juice, hang up our coats) Do we do any of the same things at home that we do at school? Are most of the things we so at school different from the things we do at home?" Etc.

8. My Friend The game begins with the teacher asking one child to stand up before the group. This child is asked to tell one way in which he and his friend are alike. (We are both boys; we are both wearing blue jeans; we are both in school; we both ride the bus to school; we are both five years old; we are both wearing sneakers.) The second

child is then asked to tell one way in which they are different. (He is a boy and I am a girl. Her hair is braided and my hair is short. He is wearing boots today and I am wearing sneakers.) The first child chosen sits down and the second child chooses a friend to come up and the game is repeated. For variety, the other class members may add likenesses and differences to those given by the two children who are standing.

B. Activities to Reinforce Associations of Identical or Similar Qualities

1. Tell Me The teacher asks a child or a small group of children, "Tell me all the things you can think of that I could wear on my hands." (gloves, mittens, rings, fingernail polish) "Tell me all the things you can think of that I could wear on my feet." (socks, shoes, stockings, sandals, sneakers, boots, rubbers, galoshes, skis, snowshoes, skates, slippers, thongs.) "Tell me all the things you can think of that are red." "Tell me all the things you can think of that are shaped like a triangle." The question would vary according to the subject matter currently being presented to the children.

2. What Goes with This Word? The teacher begins with an informal example, something like this. "Boys and girls, when I hear the word 'shoes' I always thing of 'socks'. It is that way with many words. If we hear one word, it may make us think of another word that goes with it. I am going to say a word and I want you to tell me what goes with that word or what it makes you think of." Examples: bread, mother, baby, sister, brother, hot, rain, horse, eggs, milk, mouse, dog, smoke, fish, cake, work, thunder, ice, hungry, laugh.

3. Teaching Style Which Stresses Similarities The teacher uses a mode of questioning or of making observations which stresses similarities, regardless of subject matter. ("Why are a bike and a wagon alike?" "Why are a shoe and a sock alike?" "Why do scissors and a piece of paper go together?" "Why are a spoon and a fork alike?" "Why do a hammer and a nail go together?") Initially, pictures and models may be necessary to secure acceptable verbal responses (see III, A, 5, Alike and Different Box), but later the children may be able to handle this kind of question on an auditory-vocal level.

4. Rhyming Directions During exercises or music time the teacher presents the idea of rhyming directions. "Stand tall. Face the wall." "Jump up high. Reach for the sky."

"Spin around. Touch the ground." Later, the teacher gives one direction and allows the children to complete the second direction by supplying the rhyming word. The teacher may make an appropriate motion to help supply the rhyming word. "Sit on the floor. Point to the door. Give a loud clap. Give your neighbor a tap. Stand up tall. Make yourself small. Find your nose. Touch your toes."

5. Riddles Simple riddles created spontaneously by the teacher and related to the subject matter currently being presented are a suitable activity in this area. "I am going to describe an animal to you and I want you to tell me what it is as soon as you know. This animal lives on a farm. It is large and has four legs. Sometimes it has horns. It has udders. It gives milk." (Animals, foods, items of clothing or furniture, vehicles, etc. are appropriate subjects for riddles.)

6. Animal Talk (A game by Mattel, Inc. Hawthorne, California, available from J. C. Penny, $3.66 or from most toy stores.) The red plastic barn with its pull ring produces the sounds of twelve farm animals in a random order. When the ring is pulled, the child can respond vocally with the name of the animal which makes that sound: "I hear a cow." or "A cow says moooo." or "A cow is in the barn." The pattern required for this response can be changed.

7. The Farmer Says (Mattel, Inc., Hawthorne, California, available from J. C. Penny, $3.99 or from most toy stores.) Various farm animals are pictured on a large plastic circle. When a child dials an animal and then pulls the ring, the farmer says, "This is a turkey." The sound of a turkey is then heard. The sentence varies slightly, such as, "Listen to the cat." Etc. The game is useful in helping a child to repeat exactly what he has heard - the sentence and the animal sound.

C. Activities to Reinforce Associations of Class and Category

1. Name the Farm Animals The teacher begins the activity by placing a farm animal picture on the felt board or by holding up a magazine picture. "Can you tell me the name of this animal? Where would I go if I wanted to see a cow? Right. I would go to the farm. Is a cow the only animal that lives on a farm? How many farm animals can you think of? Suppose I start with Gary. Can you tell me the name of one farm animal? We'll keep on until we can't think of any more farm animals." The same format may be used for any category useful to the subject matter

under consideration: tools, foods for breakfast, furniture, clothing, vehicles, items shaped like circles, triangles, rectangles, etc.

2. Furniture Movers Each child is assigned a room in a house. The teacher begins in an informal manner, "Pretend you are the boss of the living room, Gloria; you be the boss of a mother's bedroom, Darlene; you be the boss of a baby's room, Tony; you be the boss of the kitchen, Gary; and you be the boss of the dining room, Maria. Now, when I call out the name of a piece of furniture that would go in your room, you tell me that it belongs in your room. Are you ready? Sofa.....stove.....TV.....eating table.....refrigerator....crib....dresser." Etc.

3. Weather Game The teacher improvises a little story about the weather and the clothes we wear. "I'm going to pretend to look out of my window to see what kind of weather it is. Then I'm going to put on some special type of clothing. You try to guess what kind of weather it is from the kind of clothing I list......'Let me see, what to wear to school today...oh, my. I wonder where my raincoat is?.....and I guess I will need my umbrella. What is the weather like? It is another day and I look outside....Oh, I will need my heavy coat today...and I guess I'd better wear my boots so my feet won't get wet and cold. Where is my scarf...and I will need my mittens too. Can you guess what the weather is like? It is another day, not a school day. I look out. It's perfect day for swimming....I'll put on some shorts and a light shirt and go to the swimming pool. I'll put my swimming suit on over there. Can you gress what kind of weather it is?"

4. Naming A general discussion of names and why we have them is an effective way to begin classifying exercises. "Name all the children that you can in our school. What would happen if people didn't have names? Why do we have names? How many kinds of fruit can we name today? I will keep count on the blackboard. (Or, I will draw a picture on the blackboard of each fruit you name.) How many colors can we name? How many items of clothing can we name?" Etc. This exercise may at times be done in reverse: "What are hot dogs, lettuce, bread, and apples? (food) What are Roxie, Becky, Vanessa, and Penny? (girls) What are a banana, an orange, an apple, a pear, and strawberries? (fruit)." Etc. Another variation on this exercise is to ask which word does not belong with the others. Example: dog, cat, horse, table. "Why does table not go with the others? What are the others? (animals) Bus, train, truck, house, car. "Which word does not belong? (house)

Why does house not go with the others? What are the others? (vehicles, things that go)"

5. Downtown A pretend situation is created for the children as the teacher tells a little story. "Everybody close his eyes and listen to the things I tell you about a certain place. When you think you know the place I am talking about, raise your hand. I walk into a building. I see shelves of canned foods.....then I come to place where there are tables with bananas, apples, and other fruits... also vegetables are piled up. There is a counter with many kinds of meats in it....Can anyone see in his mind the place I am talking about....what is its name?" Other places the children might recognize would be a gas station, the post office, a shoe store, etc. Again, this exercise can be reversed. The teacher sets up the make-believe situation which leads to "I went to the (name of place) and while I was there I saw.." At this point the children supply the items which they would see in this place, making the list as long as possible.

6. What Do We Need? Pretend situations are created and the children list whatever is needed to carry out simple goals. "Your mother tells you that you can spend the night with your grandmother. You have to put the things you will need in a bag. What will you take with you?" "You are going to help your mother make pancakes (or some other food). What will you need?"

7. What Is It Made Of? Another aid in teaching children to think in terms of similarities and differences is to classify by composition (as opposed to use or color or size, for example). "Name everything in your house that is made out of wood. Is your house made out of wood too? How about your car? Name some things in school that are made out of wood. (Glass, plastic, cloth, metal, etc.)

8. Songs on One Theme Songs like"Old MacDonald Had A Farm" have a classifying principle at work. Others can be adapted and revised, such as the Bus Song: the wheels go around, the driver says, "Sit down, please.", the people go bump, bump, the horn goes beep, beep, etc.

9. How Animals Move Mimeographed work sheets, picture folders, or blackboard sketches may be used. "I have given you a work sheet with four animals on it. Raise your hand if you can tell me the name of the first animal. What is the name of the fourth animal? The second? The third? Some of these animals move very fast. Some of them move very slowly. (Animals might include a snail, a

turtle, a deer, a rabbit, etc.) Other forms of movement would be used: jumpers, creepers, flyers, swimmers.

10. Tell Me The teacher prepares a word list according to a category related to material being taught at the time. Example: Seasons(fall) list: leaves, pumpkins, storm windows, milkweed pods, pine cones, squirrels, etc. The teacher says one word to each child, and the child is asked to "Tell me about it." After a child attempts a sentence, a model may be given for him, and he repeats the informatio

D. Activities to Reinforce Hypothetical or Inferred Association

1. Auditory Association at Storytime Auditory association activities are easily incorporated into a traditional story time. Questions which are not literally factual or closely dependent upon immediate recall from the story should be used. Examples: "Why did the dog find his way home before the little boy?" "Why was the policeman like a daddy to the little boy?" "What would have happened if the old lady had caught the gingerbread man?" "What might have happened if the gingerbread boy had found a little boat at the river's edge?" This type of question can be used with any story read to the children, but a great deal of practice will be necessary before the children will be able to make acceptable responses. (A typical response to a cause and effect type of question, "Why did the boy fall?", is for the child to repeat the effect, "The boy fell.", as if in some way this explained the cause.)

2. Little Willy The teacher creates an imaginary little boy (Little Willy) and uses him as a focal point for examples from day to day. A hand puppet may be used to help create the character. The teacher recounts various events and then asks the children to tell how Willy felt. Examples: He fell down and hurt his knee. (He felt sad, sorry, hurt, etc.) He found a nickle and bought a toy truck he wanted very much. (He felt happy, lucky, etc.) He broke his sister's doll when he was angry. (sorry, glad, afraid) He ate a big dinner. (full)

3. Finish the Story A folder of large, interesting pictures is collected in advance. The teacher tells the beginning of a story to which a picture supplies a possible ending. The child listens to the teacher's story, finds a picture to complete the story, and then tells how the story ended. (Later, picture props may not be necessary.) Example: "A boy's mother told him to go to bed. He said, 'I won't.' So the mother picked him up and carried him to bed. 'Now stay there,' she said, 'or I will get very angry.' As

soon as his mother left the room, the little boy got up and ran out of his room. When his mother saw him....." (Child chooses correct picture and verbalizes the ending.) "It was a very windy day and a man was burning some boxes near a garage. He left the fire before it was out. The wind blew the burning pieces of cardboard over to the garage ....." (Child chooses correct picture and finishes the story.)

4. What If? Responses are limited to material which has been introduced in the pre-school classroom because of the limited vocabulary of the culturally deprived four-year-old.

   What would happen if we forgot to put the covers on the paint jars?

   What would happen if we did not put our names on our paintings?

   What would we do if we spilled the paint?

   What would happen if Mrs. Morris let everyone play the piano during music time?

   What would happen if we didn't pick up the blocks?

   What would happen if we didn't take turns talking?

   What would happen if we did not put the bikes away at night?

   What would we do if a child cried at school?

   What would we do if we did not have enough crackers for all the children?

   What would happen if the bus got a flat tire on the the way to school?

   In most cases more than one answer should be sought. A literal or obvious answer would be accepted but a divergent answer would be encouraged. At this age level with culturally-deprived children few divergent responses would be expected.

   Example? [illegible]?

5. What If? Responses are limited to basic family and home information because of the limited vocabulary of the culturally deprived four-year-old.

   What would happen if an egg were dropped in your kitchen?

What would happen if you left a window open and it rained?

What do we do when the baby cries?

What do you do when your shoelace breaks?

What would you do if you cut your finger?

What would your family do if the car ran out of gas?

What would you do if you got on the bus to go downtown and found you had no money?

What would happen at your house if the clock did not work?

What would happen at your house if rain came through the roof?

What would happen if you tore your dress (shirt)?

As in Item 4 above, different answers to the same question would be encouraged.

6. Let's Think The teacher begins an informal little story, stopping at a crucial point with a question. Examples: "A family went on a trip in their car. They drove for a long time. After they had passed through a town, Father said, 'There has been a bad windstorm with a lot of rain in this town.' How could Father know that?"

"They went on for another sixty miles. 'They have had no rain in this town for a long time,' said Mother. How could Mother know that?"

Similar stories can be created about any incident: What would happen if someone tied your shoelaces together? What would happen if you left a hamburger and a dog in the same room? What would happen if you couldn't open your mouth for a whole day? John brought a little snowman into the house and put him on the table. Later, there was only a puddle of water on the table. What had happened? Etc.

7. Things Which Grow Shorter After Use A blackboard sketch, a picture folder, or a mimeographed worksheet is used. Pictured objects might include: eraser, ruler, candle, book, popsickle, scissors, fountain pen, sucker, crayon, chalk, etc. All of the pictures are of things which can

be used but some of the things do not change very much after use. The children mark or name the items which grow shorter after they have been used. After the items have been chosen, the children might be asked to tell why each item grew shorter after use.

Chapter IV

VISUAL MOTOR ASSOCIATION

A. Perceiving Similarities and Differences in Material Presented Visually

B. Perceiving Relationships and Classes in Material Presented Visually

C. Perceiving Sequential Relationships in Material Presented Visually

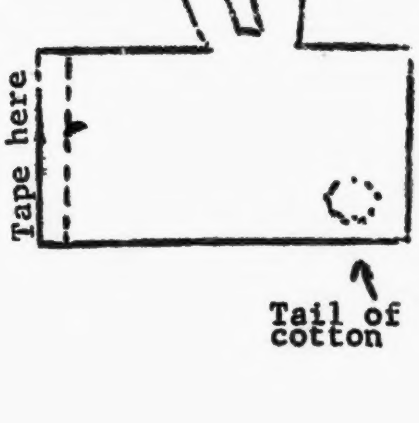
IV. VISUAL MOTOR ASSOCIATION

A. Perceiving Similarities and Differences in Material Presented Visually

1. Frostig Visual Perception Program Follett Publishing Company, Chicago, Illinois. Many of the worksheets in this set present visual similarities and differences in order of increasing difficulty. See manual for further directions.

2. Many Ordinary Routines Give Practice in Visual-Motor Association Many of the ordinary preschool routines give practice in visual-motor association; for example, chairs, lockers, coat hooks, etc. can be labeled with animal seals, color tags, geometric shapes, etc. The child learns to find and use his symbol to recognize his possessions and to keep things orderly. A later refinement on this activity is to make a large wall name chart. After the child's printed name appears his symbol (flower seal, red triangle, etc.). On his coat hook, chair, etc. appears the same symbol. The child learns what his name looks like and how to find his symbol elsewhere in the room. At intervals the symbols are changed and a new name chart is hung. When blocks are put away after play, they may be sorted by size and shape: "Put the blocks back in their special places. Put the square blocks here; the big rectangles go here. This is the shelf for the triangles." Etc.

3. Color Bunnies. Finger puppets (see sample), which should be rolled around a pencil before being taped, are made in the colors being taught. At first, children should handle only two colors. Later, they may handle five or six. The children place color bunnies on their fingers and rest their hands flat at the edge of the table. The teacher flashes a color card and the children pop up the matching bunny. (Teacher flashes a red card, children stand up red bunny.) The exercise may be varied through the use of an auditory command. (Teacher says, "Red".) A story about the bunnies may also be improvised, and the children raise the appropriate bunny whenever he is mentioned. (The blue bunny walked down the lane and met his friend the yellow bunny, etc.) Colored pictures of objects may be flashed (a red car, a green wagon, etc.), and the children raise the color bunny which matches the color of the object.



4. Coloring and Identifying Fruits (or other content, such as geometric shapes) Large, simple drawings of the common fruits (apple, orange, banana, strawberry, cherry, lemon) are mimeographed. "Here are pictures of some of the fruits we have tasted at school. Do you remember the names of them? Do you remember the colors of these fruits?" (time for discussion) "Pick the crayons you need to make your fruits the right colors." Later, the pages could be stapled together to make a fruit book to be taken home.

5. Which One Is Different? The content of these exercises would change with the curriculum, but the format would remain about the same. Prepare on small cardboard squares, on mimeographed sheets, or on the blackboard a set of clown faces. All but one have the same expression. "One of the clowns is different. Find him. How is he different?" (happy, sad, angry, etc.) "Now put all the faces that are the same in one way in a row over here and put the other face way over here." Later, three or more expressions might be used with multiple cards for each expression. A variety of sketches may be used for similar drill: four apples - one has a missing stem or leaf; five daisies - one has two petals missing; four hats - one has a missing feather, etc. Building blocks may be used to create similar exercises. Make three arrangements built of three or four blocks. One arrangement is different. "Here are three buildings. Two of them are the same. One is different. Find the one that is different. Can you rebuild it so that it is the same?" (Bridges, layer cakes, walls, sidewalks, etc. can be quickly built for this exercise.)

6. Match Patch (Arrco Playing Card Co., Chicago, Illinois, 29¢) This activity would not be introduced until the children have mastered the geometric inserts and are able to identify a circle, a square, a triangle, and an oval.

   Variations in Play: One child. The four key cards (heavy black outline of geometric shapes on four white cards) are placed before the child who classifies the object cards. (Potato and egg object cards are placed beneath the oval key card; teepee and sailboat are placed beneath the triangle key card; balloon and clock are placed beneath the circle key card; box and block are placed beneath the square key card.) The child continues to classify until the thirty-six object cards have been placed beneath the appropriate key card.

Four children. Each child is given one key shape card to use as his classifying denominator. The children may take turns drawing from a center pack of colored object cards or by drawing from each other clockwise around the table, as in Old Maid. The object of the game would be to place all nine object cards under the appropriate key card. There should be no winner; the game continues until each set is complete.

Two to five children. The four key shape cards are placed out on the table. The children draw from a center pack and place the object cards beneath the appropriate key card.

Initially the pre-school teacher may wish to begin with fewer than thirty-six object cards, using only the more common objects. As skill in visual discrimination increases, verbal statements should become an integral part of the game. The child should say, "This clock is a circle." etc. as he places the object card beneath its appropriate key card.

7. Geometric Assortment A collection of squares, circles, triangles, rectangles, ovals, in two sizes and a variety of colors, is cut from colored poster cardboard. These may be neatly stored in a three-pound coffee can with a plastic lid.

   a) Have the children classify according to shape. "Put all the circles in a pile here; all the squares here." Etc.

   b) Have the children classify according to color. "Put all the red shapes in a pile here; all the blue shapes here." Etc.

   c) Have the children classify according to size. "Put all the large shapes here; all the small shapes there."

   d) An alternate method of presentation. Have a cardboard sheet for each shape with a sample of the shape drawn or pasted to the card. "Put all the squares on the card with the square."

8. Pairs. Pairs of objects identical except for one aspect are stored in a sturdy box. Examples: two pill containers, one containing seeds and one containing safety pins; two cardboard fruit trays from the supermarket, one shallower

than the other; two white balls, one smaller than the other; two plastic cars, one red and one yellow; two empty gelatin cartons, one larger than the other. Give each child an object in turn. Have him tell the group what it is. Have him pick out the one than goes with his. Ask him to tell why it's the same and how it is different.

9. Opposite Concepts for the Felt Board. See III Auditory Vocal Association, A-2.

10. What Belongs in the Empty Square? Cardboard sheets are marked into four equal boxes with a heavy line. (Shirt cardboards are suitable and of an appropriate size.) Silhouettes of various objects are stenciled in three of these boxes with crayon or felt markers. A visual relationship is established between the objects stenciled in the two top boxes. The lower left box is also stenciled, but the child must select an appropriate answer for the lower right box. He chooses this answer from five response cards. When the child chooses the correct response card, the visual relationship may be read from left to right or from top to bottom. The relationship may be one of color, size, of object, of direction, or a combination of these. Example: A red bird is to a blue bird (top row) as a red flower is to a blue flower (bottom row). A large square is to a small square as a large circle is to a small circle. A dog with his nose pointing to the right is to a dog with his nose pointing to the left as a fish with his nose pointing to the right is to a fish with his nose pointing to the left. A simple way to use this activity in the classroom is to keep each card and its response choices in a separate manila envelope. The envelopes should be numbered in order of increasing difficulty of the contents. When a child attempts an activity, his name, the date, and the level of performance should be noted on the envelope. When he has satisfactorily completed this activity, he should move on to the contents of the next envelope.

11. ABC Match-Ups Playskool Match-Ups. (Playskool Press, Chicago, Illinois, 60618. $1.00) This game contains twenty-four pictures which are cut into two interlocking pieces. One piece shows the capital and lower case letter; the other piece shows an object which begins with that letter and also the printed name of the object. Example: B, b and bear; F, f and flower; I, i and ice cream. The pieces cannot be put together incorrectly, so the game is self-corrective. A child need not know phonics to use these puzzles, since he can match the printed letter and the first letter of the printed word which corresponds. This is a

fine visual discrimination to demand of pre-schoolers, but it is useful for the more advanced children.

12. Associative Math Concept Items (Creative Playthings, Inc., Princeton, New Jersey, 18540.) These are useful in providing practice for visual-motor associative skills.

    a) Match Mates. Ten individual wooden jig-saw puzzles, cut in half, are silk-screened with numbers on top to correspond with number of objects on bottom half. Tops and bottoms fit only when correctly matched. Plywood, each 3" x 6".

       N125 (1 lb., 8 oz.) $2.95

    b) Number Sorter. A simple, self-correcting sorting toy designed to help four and five-year-olds gain a concept of number sequence. It is also an excellent fitting toy for children between two and three years of age. 2½" rubber squares have holes to fit over corresponding number of wooden dowels on 12" wooden board.

       N120 (2 lbs.) $2.95

    c) Counting and Threading. This made-in-England toy helps the small child to understand simple number sequence and simultaneously to use his hands and fingers for precise fitting. 44 wooden discs (2 of one color, 3 of another, etc.) correspond in quantity and color to 9 single plastic plaques; each of these designates a numeral from 1 to 9. Game is to string wooden discs in sequence, with plastic plaque separators.

       R114 (2 lbs.) $4.95

B. Perceiving Relationships and Classes in Materials Presented Visually

1. Frostig Visual Perception Program. (Follett Publishing Company, Chicago, Illinois) See Manual for worksheets specifically related to this area.

2. Clothing . Items are cut from catalogs and mounted on light weight cardboard or poster paper. An appropriate size would be chosen so the items are relatively in proportion. The clothing items are to be sorted according to the following (or similar) classes:

Headgear (caps, hats, ear muffs, hoods, head scarves)

Garments for the upper body (shirts, blouses, jackets, vests, sweaters, neckties)

Garments for the lower body (skirts, trousers, shorts, slacks, tights)

Footwear (shoes, boots, rubbers, socks, sneakers, slippers)

Care should be taken to include items with differences: jackets with hoods, jackets without hoods; shoes with laces, slip-on shoes; high boots, low boots; etc.

One child or a number of children may participate, providing enough materials are available. As a key to the sorting a large cardboard showing a body silhouette and a sketch drawn to the same scale of a chest of drawers could be used. The top drawer would be designated as the place for headgear, the second drawer as the place for garments for the upper body, and the third drawer as the place for garments for the lower body, and the fourth drawer as the place for footwear. The items could also be sorted into containers or into piles on the table.

Later refinements would be the sorting of children's clothing (then separate boys' and girls' clothing) from that of adults (then separate men's clothing from women's clothing) and the sorting of summer and winter garments. Verbalization should be encouraged when a child becomes proficient at sorting. Vocabulary words to be stressed might include hood, plaid, striped, zipper, buttons, rubbers, sneakers, sandals, etc. Appropriate questions might be: "How are rubbers different from boots?" "Would you wear this in the summer?" "How are gloves different from mittens?"

3. Moving Day Items of furniture are cut from catalogs and mounted on light weight cardboard or poster paper. An appropriate size should be chosen so objects are relatively in proportion. If one child is to play the game, enough objects to furnish one house should be provided. Ideally two to five children should play, and in such cases enough furniture to complete one house for each child would be required.

In addition to an assortment of furniture, each child is given a large sheet of cardboard on which is drawn a cutaway outline of a house. Outlines for the following rooms would be suitable: kitchen, living room, bathroom, two bedrooms. A garage and suitable contents (automobile, lawn mower, garden tools, bike, etc.) could be added later on. The house plan should be large enough to contain the furniture without crowding which confuses the child. The sorting, not the placing of the furniture, should be the child's main task.

The child sorts the furniture by placing it in the appropriate room. Within reason, the child designates which room is the kitchen, etc. However, some logical choice should be required. For example, normally the teacher would not accept a kitchen located upstairs in a two-story sketch. (Split levels may have to be considered!)

When the child becomes proficient at this activity, verbalization should be encouraged. "This is a stove. A stove belongs in the kitchen." When the teacher checks the completed piece of work, she would ask appropriate questions: "What pieces of furniture did you put in the kitchen? How many chairs are around the table? Is this a child's bedroom? Can you find an oval table and a square table?"

On a simpler level for younger children, a doll house and doll furniture may be used for a similar exercise. Again, the children sort the objects according to the room in which they should be placed.

4. Playhouse (Childcraft Equipment Co., Inc. 155 East 23rd. Street, New York, New York, 10010., $1.00) This game is produced in a playing card format. There are key cards which picture a specific room in a house: dining room, kitchen, nursery, etc. There are object cards which picture individual items from these rooms: a crib, a dining room table, a stove, etc. The children classify the object cards of furniture with the proper room or key card. One child may do this sorting or a group may play by dealing out the object cards around the table or by having the children draw from a center pile.

5. Who Gets It? (Dolch Materials, Garrard Publishing Co., Champaign, Illinois., $1.59) The children match pictures of two different types of the same object. For example, an oval rug goes with a rectangular rug, an upholstered chair goes with a straight-backed chair, etc. Six children may play this game which follows a lotto format.

6. Playstore (Childcraft Equipment Co., Inc., 155 East 23rd. Street, New York, New York, 10010., $1.00) This game is produced in a playing card format. There are six different stores represented on the key cards and thirty-six items of merchandise pictured on the object cards. The children sort the items according to the proper store. One child may do this sorting or group may play by dealing out the object cards around the table or by having the children draw from a center pile.

7. People and Their Jobs (Playskool Match-Ups. Playskool Press, Chicago, Illinois 60618, $1.00) This game contains twenty-four pictures which are cut into two interlocking pieces. One piece portrays a person at his work; the other piece shows some object related to that particular job. The pieces cannot be put together incorrectly, so [illegible] the exercise is self-corrective. Sample pictures are a milkman and milk bottles, a fireman and a hydrant and hose, a barber and a pair of scissors, a mailman and a bag of mail, a house painter and several paint brushes. The game may be played alone or three or more children may play by distributing the people pieces equally. The other pieces are put face down in the center of the table. Each child draws one at a time and discards one. If he draws a matching piece, he lays down the completed puzzle. The next child may draw either the discarded card or a new one from the center pile. Play continues until all pictures are completed.

8. Animals and Their Homes (Playskool Match-Ups. Playskool Press, Chicago, Illinois, 60618. $1.00.) This game contains twenty-four pictures which are cut into two interlocking pieces. One piece portrays an animal and the other piece shows where that animal lives. The pieces cannot be put together incorrectly and so the exercise is self-corrective. Sample pictures are a bird and a nest, a penquin and an iceberg, a camel and a desert, a mouse and a hole in a wall. Directions: See Item 7 above.

9. Store Windows. (Instructo Felt Board Set, Jacronda Mfg., Philadelphia 31, Pennsylvania, $2.50.) This set includes four store fronts and familiar objects. The children match the objects with the appropriate store. The objects are printed on flocked cardboard and are suitable for use with a standard felt board. Samples: A hardware store front, a clothing store front. Items; hammer, coat, broom, etc.

10. Go-Together-Lotto (Creative Playthings, Princeton, New Jersey, 18540). The cards matched to the pictures are not identical as in most lotto games but are related. For example, a letter is placed on the square which shows a mailbox; coins are placed on the square with a piggy bank; a dog is placed on the square which pictures a dog house; a car is placed on the square which shows gas pumps, etc.

11. Go-Together-Folder A collection of magazine pictures which have an association factor are kept in folders to be sorted by the children. Vocabulary development should be added to this sorting, since many of these items cannot be named independently by the children. Examples: a tree and a leaf (An apple or a nest or a bird or a squirre might also match the tree, depending upon the exercise. So might a piece of lumber.); a hand and a mitten (or a glove or a ring or a pencil); rain and an umbrella (or raincoat or boots or a puddle or a rainbow or mud); snow and a sled (or a snowman or a snowsuit or a shovel).

12. Envelope Surprise Each child is given an envelope containing two or three categories of small cardboard backed pictures cut from magazines. Example: five pictures of food, four pictures of things with wheels, six pictures of children. The child is told to put the pictures of the same kinds of things in special piles. "All the things you can ride on, all the things you can eat." Etc.

13. Pick a Pair Present each child with four objects that can be paired in a particular aspect: a can of beans and a can of peas, a milk carton and a pop bottle, a model horse and a model cow, etc. Have the child tell why he put two items together as a pair: two animals, two foods, two things to drink, etc.

14. Gummed Seals for Matching and Sorting Folders of gummed seals are available in numerous designs at most variety stores for about 15¢. When these seals are mounted on small cardboard squares, an almost unlimited number of classification games can be played with them. A basic collection should include fruit seals, flower seals, farm animal seals, zoo animal seals, bird seals, fish seals, and butterfly seals.

Miniature wild or domestic animals can be used as keys to match the seal cards. For example, the model of an elephant, a zebra, a monkey, and a lion are placed in a row in the center of the table. The children place the appropriate card in front of the miniature. After the children can sort the various bird seals, for instance, into appropriatepiles (cardinals, robins, blue jays, etc.), they could proceed to a more difficult task--matching the bird seals to a different picture of a bird - those on the Wildlife cards, for instance, (McGraw Hill, Educational Aids Division, 330 West 42nd. Street, New York, New York, 10036). Flower seals may be sorted by color or by variety. They also could be matched to another picture of the same flower, one taken from a seed catalog for instance, or to squares cut from appropriate colored paper. Fish seals could be matched to the Wildlife cards.

15. Deriving Products Begin with a simple food, such as an apple. Discuss how it grows on a tree. Taste it. Have pictures of products derived from apples: applesauce, apple juice, apple pies. Show these pictures and discuss them. Some of these foods, applesauce and apple juice for instance, might be tasted. Later, these pictures are mixed with those of other types of foods. (meats, soups, vegetable The children are asked to put all the pictures of foods made with apples in one pile. They may be able to find other classes in the remaining pictures. The exercise can be repeated on other days: strawberry jam, strawberry shortcake, strawberry ice cream, for example.

16. Taller Buildings Each child is presented with fifteen small cube blocks. He is asked to make the blocks into buildings, each one taller than the one next to it. Initially, the teacher may help the child to begin: "Here's the short building. It is made from only one block. Can you make a taller building?....Fine. Now can you make a building from three blocks which will be even taller?' A stairstep of buildings should emerge. Another day the stairstep motif may be presented by lining the children up according to height. A long piece of wrapping paper is taped to the wall. A mark is made on the paper for the height of each child and labeled with that child's name. Later, each child is asked to find his own line.

17. Classification Boxes. Items which have a classifying aspect in common (use is an excellent quality but color or composition--plastic, wood, paper, cloth--may be used) are kept in a sturdy box. The contents of this box are changed from time to time. Sample items: a red button and a silver button, a tooth brush and a vegetable brush, a paper napkin and a cloth napkin, a plaid shoelace and a brown shoelace, etc. The children pair these items and verbalize the common element and point out the divergent

elements. A variation is to place one item from each pair into a separate box. The teacher begins by passing out the items from one box. Then the second box is passed around and each child picks the item which will complete his pair. ("Look for something in this box which is like what you have. Good. How are they alike; how are they different?")

18. *Seasons Felt Board Set* (Instructo, Division of Jacronda Mfg., Philadelphia 31, Pa., $2.50.) Flocked cardboard pictures which illustrate seasonal changes: foliage changes clothing changes, screen and storm window changes, etc. These materials are suitable for use on a standard felt board, but may be used at a regular work table for sorting.

19. *Opposites* A number of opposite concepts can be developed with visual materials. *Far and Near*. A series of pictures, such as the approach of an automobile, are presented to the children. "Here is a car far away...see how small it looks Here is the car when it is very close...see how large it is Can you put the pictures in a row so that it really looks as though the car is coming near you?" *Outside and Inside.* Pictures of items which are normally kept inside (furniture, pots and pans, clothing) are sorted from pictures of items normally kept outside (cars, cows, lawn furniture, telephone poles, a tree). See III, Auditory Vocal Association, A, 2 and 3 for further suggestions.

20. *Which Things Make a Noise*? A mimeographed worksheet, pictures from magazines, or sketches on the blackboard may be used to present a number of objects to the children. The objects are named by the children. Then all those which make a noise are marked or sorted. Example: a rooster, a button, a dog, a bowl, a belt, a bell, a leaf, a horn, a hammer, a piece of pie, a truck, etc. Similar exercises may be created to demonstrate "hard and soft," "hot and cold," etc.

21. *Which Does Not Belong*? The child is presented with four objects (pictures may be used) and asked which object does not belong with the others. Sample group: toy truck, toy airplane, toy motorcycle, safety pin; doll's dress, doll's sock, doll's shoe, crayon; cup, glass, tin can, pencil; pencil, crayon, chalk, scissors.

22. What Do We Need? This activity may be done at the felt board if the pictures are properly mounted on flocked material. It may also be done as a sorting activity at the work tables. One picture shows a mother getting ready to clean. Another picture shows a father getting ready to work in the yard. Various tools are cut from catalogs: rake, broom, dustpan, bushel basket, vacuum cleaner, mop, wheelbarrow, lawnmower, dust cloth, etc. "Mother and Father won't be able to clean the house and work in the yard until they have tools to work with. If I give you a picture of a tool, can you place it with the person who will need it?" (Naming of the tools is an important part of this activity.)

C. Perceiving Sequential Relationships in Material Presented Visually

1. Picture Stories. Line drawings or magazine pictures are prepared in frames of three or four to tell a simple story. Examples: picture 1- a tree (bare), picture 2- snow falling, picture 3- a tree with snow on its branches. Picture 1 - a tree with leaves, picture 2- leaves falling, picture 3- a bare tree. Picture 1- girl with apple, picture 2- bite out of apple, picture 3- girl with apple core. The children arrange the pictures to show the story. After the pictures have been arranged, the children should tell the story verbally. Pre-primers may also be cut up to create stories of this type.

   Initially, it may be necessary to tell the story to the children before they sequence the pictures. Later, the children may be able to do the sequence without help from the teacher.

2. Which Came First? A sequence of pictures showing a baby, a young child, an older child, a young man, an adult, an older man are presented in a random manner to the children. "Can you put these in a row so that they will tell a story? Which came first?" Similar sequences might show the construction of a house, the growth of a plant or tree, a pumpkin being carved into a jack-o-lantern, a Christmas tree being trimmed.

3. Frostig Visual Perception Program (Follett Publishing Company, Chicago, Illinois) There are a number of worksheets in this set which show picture sequences. These may be used as indicated in the manual. They may also be cut into fourths, mounted on cardboard, and manipulated by the child to show a story. When the sequence is ordered, the child should be encouraged to tell the story.

4. See-Quees. (Creative Playthings, Inc., Princeton, New Jersey, 18540.) See-quees are printed on heavy board which is cut into 3" squares and fitted into an inlay background. See-quees are available at a variety of levels and on a variety of subjects. Samples: Children's stories, such as "The Three Pigs" or "The Gingerbread Man;" nursery rhymes, such as "This Little Pig" or "Little Boy Blue;" natural phenomena, such as the stages in the growth of a butterfly or a frog; everyday events, such as grocery shopping or going to school. Since all frames from a see-quee are identical squares, they are not typical puzzles. Rather, the skill needed is the ability to arrange the pictures in a story-telling order.

Chapter V

VOCAL ENCODING

A. Responding to Visual Stimuli

B. Responding to Auditory Stimuli

C. Games

D. Problem Solving

V. VOCAL ENCODING

A. Responding to Visual Stimuli

1. Show and Tell. A child brings an object from home to share with group. The teacher helps the child to talk freely if he can but prompting him in the following manner:

   Can you tell me one thing about your ________?
   Can you tell me two things about your________?

   The child is prompted this way until he has told as many things about his object as he can.

   Although the traditional show and tell is a vocal encoding activity, it is also a "dangerous" one to introduce. It can begin a tasteless sort of competition, especially about toys and other personal belongings and it has a monotonous format. Once begun, show and tell is often impossible to stop and it drags on for weeks and months and even years--into the second grade! Improvisation of the show and tell format is a safer bet. When the children are grouped in a circle, the teacher asks one question which each child takes turns answering. (What did you do on Sunday when we were not in school? What do you do downtown? Stand up and tell us what the person next to you is wearing today. What do you like to do most when you are all by yourself and have no one to play with? Tell us what your house looks like. Tell us everything you can about the bus that brings you to school.) At first the teacher will have to prompt the children with more detailed follow-up questions or the response will be in one word only.

2. Choose and Tell

   a) Pick a page. A large Sears, Roebuck and Co. catalog is placed on the piano bench. A child is called to come up and open the book to any page at random. The child then chooses some object on that page to tell the class about. (What color is it? Who uses it? Where would you keep it? What does it do or what is it for? What is it made out of? Etc.)

   b) Pick and talk box. A variety of everyday items are kept in a box and changed from time to time. The children gather in a circle. One child at a time picks an item from the box and tells about it. To avoid difficulty in choosing it is best to hold the box high or put a cloth over the top so that the object chosen is a surprise to everyone. Sample items: a hair pin, ear muffs, a penny, a hair net, a paper clip, an earring, a candle, an eye dropper, etc.

c) Grab bag. Items are taken by the children one at a time from a covered container. Each child tells what he has in a detailed fashion. Examples: an assortment of fruit is placed in a sack. A child picks out an orange. ("It is round. It is orange. It has seeds. It is juicy. It is sweet. It grows on a tree. I like it.") An assortment of geometric shapes is cut from heavy, colored posterboard. A child draws a green triangle. ("It has three sides. It is green. It looks like the roof of a house. It is called a triangle.") This game can be made more interesting if the child does not show his item to the class but merely tells about it until they guess rightly.

d) Pick a Card. (McGraw-Hill, 330 W. 42nd St., N.Y., N.Y. 10036. $1.00.) The large size animal, bird, insect cards are used. A child draws a card from a selection which is face down on the table. "Tell me three things about the card you have drawn." (The number requested may be raised when the children gain proficiency in this task.) Responses could be: "It has two legs. It flies. It lays eggs. It is blue. It eats worms."

e) Pick a picture. Have a series of simple action pictures and have each child select one and tell a short story. "Pick out a picture that makes you think of something. Tell us what it makes you think of. Make up a story about those people (or animals)." Encourage and help the child by questions and suggestions.

f) Picture dictionaries. The Cat in the Hat Dictionary and The Little Golden Dictionary (plus many others) are suitable books to use in motivating vocal responses. The child picks a picture to tell about. His description is supplemented by the teacher who tells what the dictionary has to say about that particular entry after the child has finished.

g) Books. Books like The Big Book of Trucks or The Train Book or The Wonder Book of Trucks or The Golden Book of Boats are useful in eliciting vocal responses. As the children go through the book they can take turns telling all about one particular kind of truck -- a garbage truck, a mail truck, etc. The McGraw-Hill

Panorama books are also good for such activities. These books are made of very heavy cardboard and fold outward and stand up by themselves. The children may take turns telling about each page.

B. Responding to Auditory Stimuli

1. Tell Me What You Want. Since these children do not express themselves well and tend to use the minimum amount of language in many situations, it is important to insist on their verbalizing their needs, desires, etc. Therefore, when a child pokes the teacher and holds up her paper, ask: "What do you want?" At juice time attempt to elicit comments on the type of juice, the flavor of the cracker, etc.

2. Tell Us What You Did. Have a period, possibly at the beginning of the school day, in which the children are encouraged to tell about something which happened to them that day or the day before. Some leading questions the teacher can ask are: "What did you have for lunch?" "What did you do after school yesterday?" "Who is your best friend? Why do you like him best?" "Did you see a good program on television last night?"

3. Do What I Say. The teacher chooses a child and whispers a set of instructions to him. For example, she might say, "Go to the door, open it and close it three times, turn around and come back to your chair." The vocal encoding activity is involved when the teacher asks the other children to describe what the chosen child did. The child who can include all of the activities performed is chosen next. This can be very effective if the teacher whispers the instructions to the child and if she suggests that he do rather interesting and unusual things - sit on the table, peek through his legs, etc. The children are all anxious to be the performer next and, therefore, begin to watch very carefully so they can do a good job of describing what they have just seen.

4. Give Us a Hint Have the children think of something or perhaps they can choose an item from a collection which they must conceal from the others. Have the child give a series of hints about the item and others identify item.

5. What Do You Like To Do Best? "I want you to think about the things you like to do best - the things you like to do at home and the things you like to do at school. What do you like to do best, Gary? Is that at home or at school? What do you like to do best, Darlene?" Etc.

6. Tell Us What To Do Show the children how to make Christmas wreaths by tracing large plastic coffee lids with green crayons, adding very small green loops around this ring, adding a red bow and red berries with a red crayon, and then cutting it out. The center can be cut out and the wreath hung over the end of a branch of the Christmas tree. The next day: "We need some more Christmas wreaths. Who can tell us how to start making one? Does anyone else remember what we did?"

7. Differences and Likenesses Pairs of items (two balls: one big ball, one little ball). Question: "What do you have?" Answer: "Two balls." Question: "How are they alike?" Answer: "They are both balls." Now probe for size. Question: "How are they different?" Answer: "One is big." Etc. Supply other pairs of items in which the child sees likenesses and differences.

8. What Is It? Tell Me About It (Cut out the pictures and back them with felt.) "Today I shall give each one of you a picture. Look at it carefully and think of all the things you could say about it. Raise your hand when you are ready to tell the class about your picture. You may come up to the front of the room and put your picture on the flannel board. Let's see who can make up the most sentences about his picture."

9. Paint a Picture and Tell a Story. "One of the things so many of you enjoy doing when you have some free time is painting. You have made such interesting looking pictures I am sure those pictures would help you tell the class a good story. I think we have time for about three stories today. Who would like to be first?"

10. Know Your Fruit (Use a bowl of real or artificial fruit.) "Boys and girls, I know you can all name the fruit I have in this bowl, but I wonder how much you know about each piece of fruit. Let's start with the apple. Think of all the things you know about apples while I draw a picture of an apple on the board. Each time you tell me something

about the apple I'll put a mark under the apple picture. We'll do the same thing for each piece of fruit we talk about today. When we finish we'll count the marks. If I put many marks under the picture of the apple, what will that tell us? If I put only a few marks, what will that tell us?"

C. Games

1. Let's Pretend To Be the Teacher Game " Would you all like to pretend to be the teacher for a little while? You will have to tell us how to do something such as coloring a circle; putting on a coat; buttoning up your coat; making steps with the thick and thin blocks; how to work a new puzzle. What would you like to teach us, Gloria?.... Tony?.....Maria?.....Gary?.....Darlene?...."(Give the children hints if they need help at first.)

2. Guess Who Game "Let's all pretend to be animals in a zoo. But don't tell anyone your name! We will just tell something about ourselves and see if anyone can guess our names. Like this: 'I am a large animal with four legs. I have a very pretty coat with lots of black and white stripes. Can you guess my name?' (If no one guesses 'zebra', continue on.) 'I look a lot like a horse.' Good. Now it is your time, Darlene, to describe the animal you are going to pretend to be."

3. Let's Pretend To Be Animals on a Farm "We need a farmer who takes care of us. Who wants to be the farmer? All right, I'll come around and you whisper which animal you are going to be and the sound that animal makes. Good. Everybody knows which animal he is. Now, let's pretend we are hungry and we want the farmer to feed us. So, we use our animal voices to call him. The farmer will walk around the table and you 'moo' or 'cackle'. The farmer will say, 'Here is your food, cow (if you are mooing).' All right, farmer, you had better feed your animals!" (The farmer is using auditory decoding; the others are doing vocal encoding.)

4. Tell Us What To Do Put a child in charge of a routine activity, music for instance. Since many of the songs four-year-olds learn involve motor responses, let the leader direct the group. The teacher should improvise new verses.
   This is the way we trace in school.
   This is the way we drink our juice.
   (to the tune of "All Around the Mulberry Bush")

5. Guess What I Am Looking at To begin, the teacher will have to offer repeated examples. At this point, the exercise will be auditory decoding. Later, the children can participate in the vocal encoding as well. An object in the classroom is described, step by step, until the children are able to guess what it is. Example: "It is made of metal. It is red. It has a handle. It is on the wall. It has little holes in it. You put a pencil in one of the holes. You sharpen a pencil with it." Etc.

6. Guess What I Am Thinking of This game proceeds much as the one described above in Item 5. However, this time a class of objects is given in order to help define the responses. Example: Food. Children take turns describing a food while the other children try to guess what food he is thinking of. ("It is yellow. I put butter on it. I eat it with my hands. Sometimes it comes in a can. Then I eat it with a spoon. It is corn-on-the-cob.") Other categories could be colors, items of clothing, items of furniture, animals, etc.

7. Lotto Games Children must decide visually but express themselves vocally to get the cards they need, and they are expected to use the proper sentence structure.

   "May I have the picture of grapes."
   "I need the red circle."

D. Problem Solving

1. Telling a Story Show a simple picture to the child, a crying baby in a playpen for instance. Ask leading questions to get the child thinking: "Is the baby happy? How can you tell? What do you think made him cry?" Pictures can increase in vagueness as the child's ability to generate imaginative interpretations increases.

2. Completing a Story Begin a simple adventure story on a familiar theme. Utilize any volunteers or perhaps with a shy group proceeding around the table would be best. Continue the story as long as is moves without too much difficulty and then ask someone to give it a happy ending or a surprise ending.

3. Presenting Children with Sets or Series of Pictures Have the children arrange the pictures to make a story and then tell the story. A simple comic strip like "Nancy" may be used after it has been mounted on lightweight cardboard.

4. Can You Tell Me Why

    Leaves fall off the trees.
    Snow stays on the ground.
    We have stop signs at corners.

5. What Will We See If

    We go to a farm.
    We go to the IGA.
    We go outside after supper.

6. Have the Child Explain Why He Does Certain Things.

    Why do you wash your hands?
    Why do you pour juice just to that line?
    Why do you walk slowly with cookies on a tray?
    Why do you put books back on the shelf?

7. Tell Me How.

    You get home from school.
    Your mother cooks supper.
    You put up your Christmas tree.

8. Tell Me Where.

    You buy shoelaces.
    You hang up your coat.
    You get your hair cut.

9. Tell Me What You Have (Give each child several cardboard cars and ask identification questions.) "Do you have a red car with two children in it? Tell me where the boy is sitting. Who is driving? What color is the girl's dress? Who else is riding in the car?" Items distributed can be a variety of pictures, miniatures, or other miscellaneous objects.

Chapter VI

MOTOR ENCODING

A. Fingerplays

B. Pantomimes

C. Manipulative (Sensory) Experiences

D. Dramatic Play and Free Expression

E. Musical Adaptations

VI. MOTOR ENCODING

A. Fingerplays There are dozens of good books available on fingerplays. This activity requires careful listening on the part of the children as well as a motor response.

B. Pantomimes

1. I Am Your Mirror Children sit before the teacher (or another child who is acting as the teacher or leader). The teacher makes a gesture, changes facial expression, etc. and the children follow suit. The teacher says, "I am your mirror. Look at me. Do what I do."

2. What Am I Doing? The teacher whispers to a child what he is to do and the child acts out that activity for his classmates to guess. Here are some suggestions: washing dishes; getting dressed; eating; patting a dog; reading; sweeping; cooking; rocking a baby; hanging clothes on the line.

3. What Animal Am I? Have some of the children act out the various ways animals move. Let the others who are the audience guess or identify the animal. Make the actions very obvious ones: elephant with a swinging trunk; fish swimming; rabbits hopping; turtles plodding along; snakes sliding along the ground. The group executing the actions may want to decide on animals themselves.

4. What Can You Do? Have children draw pictures of objects from a box. (This is done individually.) Each child would have to demonstrate the use of whatever he draws. Example: Drawing a picture of a pair of boots, the child could either act out putting on the boots or walking through the snow in a pair of boots.

   The preceding game can also be played by drawing pictures of animals from a box. In this game the children imitate animals (gallop like a horse, waddle like a duck, etc.). The teacher must be sure that the children have a clear concept of the animals included in the collection.

5. Tracing Shapes. "I am going to call out the name of a shape. Then I'm going to ask someone to trace it in the air, like this for a square, and tell me what he is tracing. 'This is a square.' All right, Gary, trace a triangle. Good. Tony, trace a circle. Good. Gloria, trace a square. Good. Darlene, now listen carefully, trace an oval. Good. Maria, trace a rectangle. Good." Then call on different children for different shapes.

6. Animal Walk Although there are a number of children's records available on this theme, at first it is expedient to work with the children yourself and help them to develop an acceptable motor response for each animal. The record will proceed too rapidly and without enough repetition for young children, and confusion will result. An elephant walk can be taught as a slow walk with the head forward and the arms together swinging from side to side like a trunk. A cat can walk very, very quietly. Etc. As the children become familiar with more domestic and wild animals, the repertoire can be enlarged. (Birds can flap, bunnies can hop, storks can stand on one leg, etc.)

7. How Would You Walk? The children, either as a group or by taking turns, are asked how you would walk if you were an old man with a cane, a baby, a giant, a lady in high heels, a boy in boots that were too big, walking on ice, walking in deep snow, walking in sticky mud, walking against a very strong wind, walking if you had one broken leg.

8. Do What I Say This can be used as a group activity. The teacher gives directions; the group executes the activities. (Roll a ball, bounce a ball, toss a ball ove your shoulder, throw a ball to your friend.)

9. Household Pantomime At first it will probably be necessary to bring in actual household items to familiarize the children with their operation. Later they can be asked to pantomime that operation. Sample items: an egg beater, a hammer, a screw driver, stirring with a spoon, swatting flies, ironing clothes, drying dishes, pouring from a bottle, setting the table, sewing on a button, painting a wall, scrubbing a floor, sweeping a floor.

10. Schoolroom Pantomime As the children become familiar with the school routine and with ordinary school equipment, there are many actions they can pantomime. Sample items: cutting with scissors, picking up paper scraps from the floor, sharpening pencils, painting on an imaginary easel, wiping up imaginary spilled juice, drinking from a water fountain, playing a piano, taking off coats and hanging them up, putting on boots, washing your hands etc.

11. At Home Pantomime Again, the actions can be categorized to give the activity greater meaning. Actions concerned with getting up in the morning: brushing teeth, combing hair, getting dressed, putting on shoes. Actions con-

cerned with mealtime: drinking from a cup, setting the table, cutting with a knife, eating soup. Actions concerned with helping mother or father: dusting, carrying out the garbage, washing the car, mowing the lawn, washing windows. Actions concerned with getting ready for bed: hanging up clothes, taking off clothes, opening the bed. In this activity, as well as in the preceding two, some of the children may be allowed to guess the action being pantomimed. However, the idea of pantomime must be developed as well as some skill in pantomime before the guessing part of the game will be successful. In the earlier stages it is probably better to have all children engage in the actions.

12. Show Me

a) "Today we will choose our toys in a new way. You will be able to use puzzles, building blocks, hammering sets, etc. now, but you have to pretend you have lost your voice. Show me what you want to use by pretending to use it. Who is ready to act out what he wants to use?"

b) "Show me what you got for Christmas by pretending to play with or use the things. You be first, Gary, and the rest of us will guess."

c) "Remember when we talked about the things we like to do best? Let's act out the thing we enjoy doing best this time. Who wants to start? All right, Tony."

d) Have a selection of items used frequently during school (pencil, crayon, geometric inset, hammer, simple puzzle, book, cups, napkins, etc.). "I am going to hold one of these up and I want you to pretend to use it." If the children have difficulty, make hints or demonstrate. Repeat the objects so that those children who were unable to do it the first time without copying can practice.

C. Manipulative (Sensory) Experiences

1. Blocks Give the child three blocks and tell him to make a bridge, a triangle, a pile of lumber, a three layer cake.

2. Cans and Dowels Give the child five cans or dowels of the same height but graduated in width. Ask him to make a tower with the thickest can on the bottom.

3. Jumbo Rods Give each child a nine unit rod. Tell him he is to make four more rods that length by matching two others. Give him the eight unit rod and see if he can match the one unit to it. Can he match seven and two, six and three, five and four?

4. Cylinder Blocks Give the child the cylinder block with cylinders in so he realizes each one has a place. Show him how they are different, thick to thin, short to tall, etc. Take the blocks out, mix them up, and tell him to put each cylinder back in its place. Blindfold him and let him replace them.

5. Dressing Forms Provide child with actual materials he uses in self help: buttons, zippers, snaps, hooks, shoe laces. Use other articles requiring special techniques: a purse to open, a watch to wind.

6. Woodworking Tools Provide child with materials for manipulation: screw driver, pliers, hammer and nails, flashlight.

D. Dramatic Play and Free Expression

1. Dramatic Play with "Dress Up" Materials. All free dramatization is motor encoding. Have a selection of hats, both for girls and boys, and let the children pretend to be the person who would wear that hat. Suitable hats are a fireman's helmet, a cowboy hat, a fisherman's hat, a nurse's cap, a policeman's hat, etc. Encourage the children to do things as well as talk like the person they are pretending to be. For instance, if the child is wearing the fireman's hat, suggest he put out a fire. The teacher might even show him how he might use an immaginary hose and put out that fire.

2. Dramatic Play on Familiar Themes

a) After the children have been told a story many times until they are very familiar with it, have them act it out. Some good stories for this activity are "The Three Pigs," "The Three Bears," and "Little Red Riding Hood." Give each child a part. If the acting stops or the children become confused, the teacher can repeat that part of the story to provide a clue for the children.

b) "Let's make believe we're still home in bed. What do we do when it's almost time to get up and get ready for school?" Encourage the children to make specific motions of waking, getting dressed, pouring cereal, eating, etc.

c) Many nursery rhymes lend themselves to pantomime. For example, "Jack Be Nimble," "Little Miss Muffet," "Jack and Jill," etc. Sometimes the entire class may act out the same rhyme; at other times they may take turns acting out a rhyme before the group. The teacher recites the rhyme slowly while the children act it out.

d) "Let's pretend to be an animal. Would you like to play a pretend game about a little animal? First, you must guess the name of this animal. Ready?

It is not very big.
Its home is in a tree.
It has a long furry tail.
It will eat all kinds of nuts.
It is a ____________.

Good! You guessed that it was a squirrel. Close your eyes and repeat after me: 'Quee, quee, quee!' Now you are a squirrel. You are a baby squirrel curled up in your nest in the tree. You are tired of being a baby. You want to be a grown up squirrel, like mother.

One day Mother Squirrel leaves the nest to hunt for food. 'Now is my chance!' you think. 'I'll climb down this tree and see what this big, wide, world is like.'

On the ground you look all around to see what you can find. Over there is a big log. Wouldn't it be fun to climb up on the log and run up and down on it? Ooops! You slipped! Back on the ground!"

"What else can you see? Oh! Look at those pretty red berries. Are they good to eat? Ugh! Well, you weren't very hungry for berries!

Then you spy a big stump. Off you go to play 'King on a Stump.' Be careful! You backed up too far and almost fell off your stump.

Something drops to the ground. A nut! A nut tree is over there. You race to the tree and grab a nut. While you are busy eating, a big red fox creeps quietly toward you. Just as he is about to pounce on you, a Redbird calls out, 'Danger! Run, Little Squirrel, run!' Up the tree you go as fast as you can go.

After awhile the fox goes away. You climb down the tree very, very quietly. On the ground you look all around. Then you hurry from tree to tree until you come to your very own tree. Up you climb until you reach your nest. You curl your long, bushy tail around you. As you drop off to sleep, you think, 'Maybe a grown up squirrel doesn't have so much fun after all!' "

e) For a day that looks like snow. ([illegible]):

"This morning when we talked about the weather we decided it could start snowing almost any minute. How would you like to play a pretend story about a little snowflake? Good! I thought you would. Remember, now, a little snowflake cannot talk. It moves about easily, lightly. A little snowflake would never clump, clump about, would it? Of course not. As you play this story I'd like to see how many parts of your body you can move. Are you ready? Well, then,

Close your eyes and count to three.
A little white snowflake you will be.

Adventures of a Snowflake. High above the earth are many big, grey clouds. There are so many clouds they seem to cover the whole sky. You, Little Snowflake, are in one of these clouds. There are so many snowflakes in the cloud with you that you move restlessly here and there. As you move about, you keep bumping lightly into each other. Finally, the cloud says very crossly, 'All right, you snowflakes, if you can't keep still, out you go!' "

'Out of the cloud you tumble, and you begin to float toward the earth. You float easily, lazily, down, down, down!

Suddenly the wind begins to blow, and you float faster - here, there. What is that tall, dark monster below you? It seems to reach out with hundreds of arms to catch you. You try to float past it, but you can't. The wind is pushing you down, down. You land on one of the monster's arms and there you stay, stuck fast. You are on top of thousands of your friends who were caught there before you. You tug and you pull, but you cannot get away. Finally, you just rest quietly.

You look all around. What can you do? Will this monster eat you? Then the wind begins to blow harder, and the monster's arms begin to sway back and forth, back and forth. Suddenly you feel yourself slipping. Woosh! There you go, you and thousands of your friends. Down, down you tumble toward the ground. By this time you are so tired you snuggle up close to your friends and fall fast asleep. The big, grey clouds are empty now, and they silently begin to disappear.

When morning comes, the bright sun awakens you. You squirm and try to keep its bright light out of your eyes. After awhile the sun climbs higher in the sky, and a shadow falls over you. Now you can see! The shadow is made by a big tree. Was that the monster who had caught you with one of its many arms?

Just then you hear voices. You look up and you see two children running toward you.

'Oh, the beautiful, beautiful snow!" cries the little girl. 'I think I'll lie down in it and be a snow angel.'

'You can be an angel if you want to,' said the boy. 'I'm going to make a snowman. The snow is just right for packing.'

You watch as the boy picks up some snow and makes a ball. Then he puts the snowball on the ground near you and begins to roll it in the snow. Soon his snowball rolls right over you, and you are caught up in it. Over and over you roll - over" "and over. Now it is very dark because you are somewhere inside the big snowball. What will happen to you? Will you ever see the bright sun again?

The rolling stops and you lie very still. You can hear the voices of the children, and you wish you could see what they are doing. After awhile you hear the boy say happily, 'My snowman is almost finished. I think I'll just push away some of the snow right here. Then it will look as though my snowman has legs.'

Now there is light. Some of the snowflakes that covered you have been pushed away. You can see again. You see the children jumping around you as they say, 'What a handsome snowman! Maybe he will last all winter!' You feel very proud.

Then the children go away, and soon it is night. You cuddle up close to your friends and go to sleep.

When the morning sun awakens you, you feel somehow that things are different. The sun is brighter, warmer, and you seem to shrink a little. Then you, too, seem to be changing. All at once you become a drop of water, and you roll down to the ground. You are no longer a snowflake!"

f) How do I feel? Another activity would be to have the children attempt to act out feelings. This is more difficult than simply going through gestures, but if the teacher demonstrates and helps the children they should be able to become more skillful in this area. The teacher should tell a story at first to attempt to set the mood. She should use gestures and varying tones of voice to help the story along. Some feelings which could be acted out are: happiness, sadness, hurt, headache, stomachache, yawning for sleepiness, earache, etc.

g) Show me. This is an activity which can be done after any story or interesting event. Ask the children to draw a picture about whatever happened.

Give each child a piece of chalk and room at the blackboard. "Draw a man on the blackboard. I'll come around and help you and you can point to the parts I ask you for, such as the head." If the child has done a very crude job, just a head for instance, suggest he add a body. Have him feel his head, etc.

E. Musical Adaptations

1. Songs with Motor Encoding There are many pre-school songs which require acting out. A few we have tried include:

   "Up on the Mountain Two by Two" (Let me see you make a motion.)

   "This Is How the Father Indian Plays upon His Drum"

   "Sally's Hammers" (one hammer, right hand; two hammers, left hand; three hammers, both feet; four hammers, nodding head)

   "Did You Ever See A Lassie" (go this way and that--motor directions vary)

   "Here We Go 'Round the Mulberry Bush" (wash our clothes, sweep the floor, etc.)

   "Looby Loo" (put your right foot in, take your right foot out, etc.)

   "I'm Very, Very Tall"

2. What Song Is This? Have the children act out all the verses to a song. Supply the activity first, and then identify the song.

3. This Is the Way My Dolly Walks. Have a doll or teddy bear for the children to observe. Have the doll move in various ways and have children duplicate the actions; walking stiff-legged, walking sideways, walking with a high kick, etc. Have the doll assume different positions and move in those assumed positions. Have the children duplicate the actions of the doll.

4. Creating Original Stories Tell the children a story which would fit in with a musical piece you are going to play for the children. For example, tell a story about a little Indian boy who does a rain dance for his tribe so the corn will not die. He dances and it rains, saving the crops. Then play a suitable piece of music. The "Apache Dance" would be a good choice. Have the children

pretend they are the little Indian boy and do a rain dance. Music from the Nutcracker Suite is also good for this type of activity with more advanced children.

5. Musical Stories "The Giant in the Woods." "One day a group of children are walking through the woods. All of a sudden they see a giant fast asleep. Being afraid of this giant, the children scamper behind some nearby bushes. One brave boy ventures out to prove that he is not afraid. Walking around and around the giant, he finally jumps over the giant and does it again and again. Finally he beckons to his friends to come join him. All the children come out and one by one jump over the giant. The last child to jump trips and falls on the giant awakening him. Again the children scamper behind the bushes. The giant smiles at the children and beckons them to come out; he is a friendly giant. The children all join hands and form a circle around the giant."

6. The Apple Orchard "Did you ever pick a big, red apple from a tree in an apple orchard? I see a few of you have. Was it fun? Would you all like to pretend that you are going to the apple orchard? Well, then, we'll go. But first I want you to listen to this music. It will tell you whether you are to run, walk, or skip to the apple orchard. Raise your hand when you know how the music wants you to move. Good! The music tells you to walk. When the music stops, you will be in a big apple orchard.

   Now you are in the orchard. There are many trees, and each tree has a ladder that reaches to the top of the tree. Under each tree there is a bag. Pick up the bag and climb up the ladder into the tree. Pick the apples one at a time and put them into your bag. When the bag is full, climb down the ladder. You have worked very hard and you are very hungry. Choose a big, juicy apple from your bag. Sit down under a tree and eat your apple. While you are eating, listen to the music that will tell you how you are to go home.

   Can you tell me how the music wants you to move? Right! Now skip away home until the music tells you to stop." (Material needed - record with walk and skip rhythms.)

7. Halloween Witches "We have been singing songs about witches. We have drawn witches. Now, how would you like to pretend to be witches? Good! I thought you would! Before you can be a witch, I want you to listen to some music. This is very mysterious sounding music and it

should make you think of witches and how they move. These old witches gallop on broomsticks and leap over haystacks or maybe over the moon. Raise your hand when you think the music tells you to leap. Put your hand down when the music tells you to gallop again. Very good! Now you are ready to be witches." (Material needed - Record No. 1553-B., Bowmar Records)

8. Decorating the Christmas Tree "Didn't we have fun decorating our Christmas tree? Suppose we listen to some music that will make you think of the way we moved when we decorated our tree. When we started to decorate our tree, where were the ornaments? Right! They were on the floor. To get an ornament, you had to bend down to pick it up. Then some of you had to stretch if you wanted to put the ornament high on the tree. Let the music tell you when to bend down to pick up an ornament and when to reach high to put it on the tree." (Materials needed - Record 1554 B, Bowmar Records.)

9. Easter Bunny Hiding Eggs "Would you like to pretend to be an Easter bunny? All right! Now you are an Easter bunny with a big basket of Easter eggs. You hop from place to place hiding eggs for all good little children. To help you with your bunny hopping, I shall play some music. The music will tell you when to stop hopping and when to hide the eggs." (Materials needed - Record 1555 A, Bowman Records.)

10. Moving to Music

    a) Moving to the beat of the drum.

    b) Let the music tell you how to move.

    c) Rhythmic movement with chiffon scarves. Materials needed: a rainbow assortment of filmy chiffon scarves, two for each child is best; records or one teacher available at the piano. The children may use the scarves for rhythmic movements but they also may use them to give impressions of actual events: birds flying, boats sailing, a tree in the wind, leaves falling, fire burning, etc.

Chapter VII

AUDITORY VOCAL AUTOMATIC

A. Use of Concrete Materials to Encourage Grammatically Correct Responses

B. Use of Less Concrete Visual Materials

C. Use of Model Sentences

D. Use of Word Omission and Sound Blending

VII. AUDITORY VOCAL AUTOMATIC

A. Use of Concrete Materials to Encourage Grammatically Correct Responses

1. Miniatures and Models These miniatures may be used in many ways to provide situations for good grammatical drill. ("Th father is taller than the mother. The baby is in the mother' arms. The children are playing on the floor. The mother is calling them." Etc.) Verb forms, singular and plural, comparative terms, prepositions may be drilled through the use of manipulative miniatures. Of course, the child must hear the correct model and make the vocal response; he cannot be allowed simple "free play" with the miniatures. A child may be allowed to play freely with the models if he tells what he is doing. Then the teacher may correct his language pattern or supply the needed models.

   a) Toys by the pound. (Creative Playthings, Inc. Princeton New Jersey, 18540.) Approximately 100 pieces by volume, one pound by weight.

   b) Bendable figures. They bend easily and may be positioned to walk, sit, ride, etc. Scaled 1" to 1' (father is 6"). Rubber, with plastic coating.

      1) Bendable Rubber Integrated Community Workers. Set of 6. Includes worker, captain, policeman, mailman, conductor, and fireman.
         B319 (1 lb.4 oz.) $9.75

      2) Negro Family. Five members: Mother, father, son, daughter, and baby.
         B492 (12 ozs.) $8.25

      3) White Family. Five members: Mother, father, son, daughter and baby.
         B292 (12 oz.) $8.25

      4) Bendable Rubber Negro Grandmother and Grandfather.
         B450 (10 oz.) $3.75

      5) Bendable Rubber White Grandmother and Grandfather.
         B350 (10 oz.) $3.75

   c) Sculptured play people. Set of 7, scaled 1" to 1'.
      B[illegible] (1 lb.,4 oz.) $6.95

d) Stationary figures. These rubber figures are similar in size and appearance, and have the same tactile appeal as bendable figures. They do not have the interior armature that allows them to take a variety of positions.

1) Stationary Rubber White Community Workers. Set of 5: Fireman, policeman, doctor, nurse, mailman.
B305 (14 oz.) Set $5.25

2) Stationary Rubber Negro Community Workers. Set of 5: as above.
B405 (14 oz.) Set $5.25

3) Stationary Rubber White Family. Set of 5: Father, mother, brother, sister, and baby.
B290 (10 oz.) Set $4.95

4) Stationary Rubber Negro Family. Set of 5: as above.
B490 (10 oz.) Set $4.95

2. Where Is It? Have containers (boxes or pie pans of two sizes) and a red and a white poker chip (or equivalent objects). Place the red chip in the big container and have the children verbalize: "The red chip is in the big box ." Place the white chip in the little box and have the children verbalize. Place the red chip in the big box and the white chip on the table. Have the children verbalize: "The red chip is in the big box." Ask the question: "Is the white chip in the big box?" Probe for the answer: "No, the white chip is not in the big box."

3. Relationship to Child's Body. Since body image and the use of prepositions (acquired by auditory-vocal automatic process) are both areas in which the culturally deprived preschooler is weak, the following drill is useful. The teacher uses a small object (pencil, eraser, penny) and places it in relationship to the child. At first the teacher supplies the

model. "The penny is behind your ear. The penny is over your head. The penny is on your head. The penny is on your nose. The penny is under your shoe. The penny is in your pocket. The penny is under your chair." Etc. After each statement, the teacher asks, "Where is the penny?" and the child answers, "The penny is over my head." Etc. Later, the child should answer the question without having been supplied the model response. The game may be varied by giving the children pennies and a block or a small doll, etc. The children follow the command and repeat the model. "Put the penny under the block." Child: "The penny is under the block." "Put the penny between two blocks." Child: "The penny is between two blocks."

4. How Many? Using counting books, pictures and objects, have the children form plurals of nouns. Say "I have one block. How many do you have?" Have the child answer, "I have two blocks." This activity can be done quite profitably in conjunction with counting exercises. The child learns to say the number of things and what those things are, using the plural. For example, "I see four dogs. I see three pigs. I see six mice." Once this pattern is learned, the teacher can use this activity for a few seconds throughout the day's other lessons.

B. Use of Cut-outs and Pictures in Eliciting Grammatically Correct Responses (Less concrete visual stimuli.)

1. Instructo No. 27, Arithmetic Readiness Vocabulary (Teachers Publishing Corporation, Darien, Connecticut, 06820. $1.95.) The cardboard flocked cut-outs are useful with a standard felt board in teaching correct language models, particularly the comparative terms. The cut-outs illustrate concepts such as many-few, more-less, big-little, young-old, long-short, etc. Although this set is called arithmetic readiness, it is very useful in creating situations for the stimulation of grammatically correct responses.

2. Flannel Board Cut-outs (Milton Bradley Co., Springfield, Massachusetts, 01101.) Over 144 stars, hearts, discs, birds, trees, flags, and rabbits. For teaching primary arithmetic by relating objects to numbers on the Flan-O-Graph.
No. 7803 $2.00

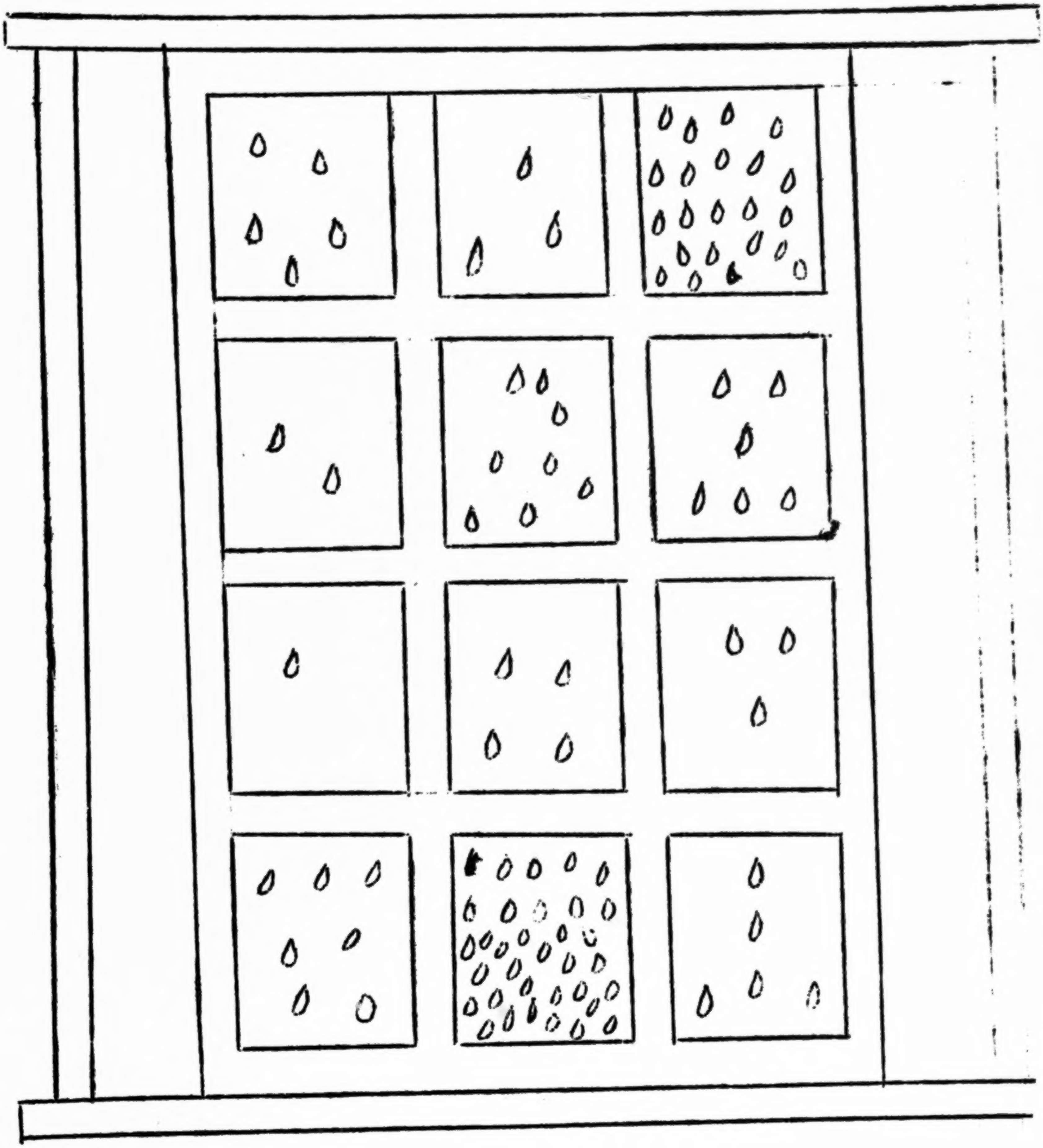
The flannel board cut-outs can be used effectively for drill in singular and plural. Counting activities in which the child says the noun word pictured as well as the number are also effective. Example: Child says one penny, two pennies, three pennies, four pennies, instead of merely counting the pennies by saying one, two, three, four.

3. Opposite Instructo Using the Opposite Instructo game and other pictures, the teacher can have activities stressing the use of tense. The teacher points to one picture and says, "The boy will go." Then she points to the next picture and says, "The boy is ____." The children must say "gone" because there is no boy in the picture and gone is the past tense. (Jacronda Mfg. Co., Philadelphia 31, Pa.)

4. Pictures for Singular and Plural Find an assortment of pictures so that each object is pictured as a single unit and in another picture as a multiple unit. (One apple, two or more apples; one child, many children; etc.) First, establish to your satisfaction that the children know the proper words for the singular and plural of each object by pronouncing the singular or plural of the objects and having the children point to the picture they think it represents. Thus, "I will call out the name of some of the things in these pictures and you point to the picture you think I am talking about. For instance, point to the knives, the knife. Point to the glass. Point to the child." Etc. If the children have difficulty making the differentiation, you will then have to establish the correct terminology through the use of suggested activities mentioned above. However, if the children can differentiate the singular and plural, you can alter this activity by having the children take turns holding up a picture and letting the other children identify it.

5. Raindrops on My Window (See sample on following page.) This exercise and similar ones can be devised to provide simple visual stimuli to evoke grammatically correct responses. The teacher provides the correct model when necessary. Comparative concepts could be taught with this stencil: most, many, few, fewer, fewest, single. In Easel and Listening Games, see Auditory Decoding, A,3,c, there are many simple visual situations which require responses of considerable grammatical refinement.

6. Providing the Model Sentence In conjunction with lotto and matching and classification games, the children should be presented with a model sentence to describe what they are doing and why. For example, in the store classification activity, they should be presented with the model, "I have a ______ and it belongs in the _________ store." This can be done with most association activities.



Raindrops on My Window

7. *Riddle-a-Rhyme Lotto* (Childcraft Equipment Co., Inc. P.O. Box 280, Madison Square Station, New York, New York, 10010., $1.00.) The game contains six playing boards and forty-eight pictures for riddle and rhyming. The teacher would need to read the riddle-rhymes, but the children could provide the rhyming answer and the correct picture for the lotto board.

Example: "It's made of wood
And rhymes with hat.
To hit a baseball
You need a ____."

Child responds with word "bat" and finds the correct picture card to place on the lotto board.

8. *Kindergarten Rhymes* This has flannel cut-outs by Mary Jackson Ellis. (Teachers Publishing Corporation, Darien, Connecticut, 16820.) This set includes over 100 flannel cut-outs and a 48 page book of rhymes which fit the pictures.

Example: I met a *toad*
On a *road*

See a *hen*
In a *pen*

The underlined words have accompanying pictures.

Tap your *toe*
Srart the *show*

Come to *town*
See a *clown*

This set may be used in a variety of ways. Usually the children are asked to supply the second rhyming word. A visual clue may be given (child chooses the correct word from looking at four or five pictures), but the child may also be asked to provide a rhyming word without a picture clue. When pictures are provided, the child may be asked to choose both rhyming words. The teacher may place on the table rhyming word pictures in pairs, including some pairs which do *not* rhyme. The children are asked to name the pair and take out those which do not rhyme (do not sound alike). The teacher may give rhyming riddles, such as: "I am thinking of an animal. It has four legs. It has a long tail. It rhymes with hat." (cat) Rhyming pictures are placed at random on the flannel board. A child chooses one picture and then looks for another picture which rhymes with the first one he chose. He then repeats both words and places the pair on the chalk ledge.

9. Use of Lotto Games for Sound Blending Use the "Go Together" lotto game, but in a new way. "This time I will not hold up the little card, but will call out part of its name, like this - 'ch - a - i - r' - and you will look on your cards to see if you have it. If you do, say its name and I will then give you the little card to cover up your picture." It might be necessary to go over the little cards first, holding them out and sounding out their names in this fashion before actually beginning the game.

10. Varied Use of Materials It is obvious from the above activities that materials can be used in a variety of ways in drills for emphasis in various areas of grammar. Thus, a lotto game could be used at one time to emphasize the use of model sentences and at another time to stress sound blending.

C. Use of Model Sentences to Improve General Grammar

1. Middle-class Mother Model Insofar as the teacher has the courage and the stamina, she allows no grammatical error to go uncorrected. The right model is provided and the child is to repeat the correct pattern immediately. In many instances, all the children can repeat the model together to avoid self-consciousness on the part of a single child. Whenever possible, complete sentences are required for all responses. It is not feasible to insist on a complete sentence for all responses because an entire lesson plan can bog down in the constant demanding of a sentence form. Particularly is this true when new material is being presented. After the new vocabulary or concept has been partially mastered, it can be absorbed into a sentence response.

2. Circle Activity For the first several days until names are familiar, the teacher explains, "My name is (teacher's name). Will you say good morning to me? When I tap you, will you tell us what your name is and we will say good morning to you. Will you say, 'My name is Tasha'? We'll say 'Good morning, Tasha.'" Skip any child who is shy and finds this threatening.

3. Music Activity Teach the first verse of a song such as "The Wheels on the Bus." This is the model that the children should follow in this song:

   "The wheels on the bus go around and around,
   around and around,
   around and around.
   The wheels on the bus go around and around,
   all through the town."

   The underlined words are the ones which change from verse to verse, although the pattern stays the same. In order to sing new verses which are introduced frequently once the children have learned the pattern, the children must apply the pattern or, in other words, use the model. Another son which is of the same type is "When Mary Wears Her Blue Dress."

4. Calendar Activity Emphasize names and sentence structure "Today is Monday, November first."

5. Juice Activity Each child must ask for his crackers and juice in a correct way. "May I please have some more juic

6. Association Activities Supply the correct sentence model in all visual-motor association games (as well as in all areas of the curriculum).
   "This is a __________."
   "This is not a __________."
   "These are alike because this one has ________ and this has __________."
   "These are different because this one has ________ and this one has _________."
   "They both have __________."
   "__________ does not belong there because ___________."

7. Talking Time (after a holiday) "Let's tell each other what we ate for Thanksgiving. I had turkey and dressing and gravy. I had pumpkin pie, too." Each child has a turn and must respond in complete sentences, not single words.

8. Tape Recorder. Brief lessons may be recorded completely and then parts played back to the children so that they may hear exactly how they responded. However, before the tape recorder can be used effectively, a great deal of familiarity with the machine is necessary. At first the recorder will ruin the lesson plan. After the novelty ha worn off, it can be effective. A very limited use is bes

at first. Teacher makes a statement and each child makes the same statement. Play back immediately. Teacher asks a question. Each child answers that question or a new one. Play back immediately. Children count pennies, up to five perhaps. Record the counting and play back. Children give their names and describe what they are wearing. Play back immediately. The suggestions above would _not_ be done at one recording session. Rather, the daily use of the machine for five minutes is recommended.

D. Use of Sound Blending and Word Omission

1. _Farm Animals_ "We are going to pretend to be animals on a farm. We won't tell our full name though. When it is your turn, just start your name - like this: 'I am a co...' and the rest of us will guess the rest of your name." If the children have trouble starting, go around to each suggesting an animal if necessary or helping them with the beginning. (Ho...., sh....., pi.., ch.....)

2. _"Tell Me at Whom I'm Looking"_
I see a girl named Ta______.
I see a boy named To_____.
I see a boy named Ti_________.

3. _Riddle Format_. A sound blended word can be given as a sort of riddle. Further hints can be provided or the blending can be speeded up until the child can provide the word. Another way to incorporate sound blending into the regular classroom routine is to sound any word answer that the children are unable to provide. Instead of providing further information to help the child come up with the right word, as one would usually do, the teacher sounds the answer slowly: b - a - s - k - e t, speeding up the sounding as necessary.

Examples:

"I Spy." The teacher says: "Boys and girls, we are going to play a game called 'I Spy'. I will say 'I spy', and you will say, 'What do you spy?' Then I will say, 'I spy something that starts with a ____ (sound of letter).' Then you will try to guess the thing. If you do guess what I see, then it is your turn to say, 'I spy.'"

"I'm Thinking of Something." The teacher says: "Let's play a new game. I will tell you something about a thing you can see in this room. I will also make the beginning sound of the object. Are you ready?"

"I am thinking of something in this room that
a) is green. You write on it with chalk. It is the ch(alkboard).
b) is made of wood. You sit on it. It is a ch(air).
c) is made of paper. It has pictures in it. We look at it. It is a b(ook)."

4. Rhyming Format "Can you make a rhyme? Let's see if you can finish these sentences:

Find your nose, touch your _______ (toes).
Take a nap, put your hands in your ______ (lap).
The little mouse ran into his _______ (house).
My little cat found a funny _____ (hat).
The big black dog jumped over a ____ (log).
The little bunny looked very ______ (funny)."

5. Completion of Familiar Songs Use some of the songs and finger plays with which the chiddren are familiar and say most of the words, skipping or omitting a word here and there for the children to fill in. Thus, "The wheels on the ____ go around and around, around and around, around and around. The wheels on the bus go around and around, al through the _______."

6. Help in Forming Plurals See if the children can complete the sentences:

"I have two hands and two ______(indicate feet)."
"If I have one loose tooth I can chew with all my other ___________(indicate teeth)."
"I have one nose to smell with, but Tony and I together have two _________(touch noses)."

7. Help in Changing Tenses See if the children can complete the sentences:

"We will sing in school today. Yesterday we ____(sang)."
"I can run fast when I play baseball. Yesterday I played tag and I ____(ran)."
"I am going home when the bus comes. Tomorrow I will __(g
"I rode on the bus yesterday. Today I will _____(ride)."
(Switch this and see if they know rode.)

8. Use of Books. Books which follow a repetitive style are useful as auditory closure drills. (Stop That Ball, Peter Johnson and His Guitar, My Ball of String, A Fly Went By, etc.) Either the illustrations or the repetitive style will supply the necessary clue for the children to respond to words which the teacher leaves out of the story. In some cases, the rhyme will be the clue.

Chapter VIII

AUDITORY VOCAL SEQUENTIAL

A. Recall of Familiar Class Items

B. Recall of More Abstract Numbers, Letters, Rhythms

C. Recall of Songs, Finger Plays, and Nursery Rhymes

D. Recall of Directions

E. Recall of Story Content

F. Action Games

VIII. AUDITORY VOCAL SEQUENTIAL

A. Recall of Familiar Class Items

1. Props Use props during initial stages until children know what is expected of them.

   a) Geometric shapes. Give each child a set of geometric inserts. "Now, I want you to listen very closely. I am going to call on you and call out three different shapes - such as 'circle, square, oval.' Then you will tell everyone those names and hold up the shapes in the order as they were named. Like this: (Demonstrate.) All right, Darlene, I am going to call on you first: 'A rectangle, a triangle, a circle.' Now you say them. Now hold them up...first, the re_____, that's it." Proceed on to the other children.

   b) Grocery list. When this game is introduced and for several sessions after, it is probably a good idea to use props. An egg carton, a butter box, a soap container, empty tin cans with the labels left on, etc. are given to the children as the grocery list grows. "I went to the store to buy butter. I went to the store to buy butter and eggs. I went to the store to buy butter, eggs, and milk." Etc. When the children understand the format, the objects can be placed unde the table. Later, the game can be played with no pro at all.

      An alternate way of playing this game would be to use a group of (empty) grocery containers (cans, boxes). Start with three. "Let's pretend this shelf is a grocery store and I am putting out some groceries." (Li up the 3 containers.) "What have I put in this row? Let's name them: milk, eggs, oleo. Good! Now turn around and look at this (walking around opposite the shelf) side of the room. Don't look back...and tell me the things we put on the shelf. What was fir ...next?...and last?....Good. Now I will change the row around. All right. Let's name the groceries now 'oleo, milk, eggs. Now turn around and look across the room." Etc.

   c) Travel games. Suitcase Packing. Children sit around a table in small groups (four to six children). Each child adds a new item that will be put into the suitcase after repeating the ones which have already been mentioned, in the order of their original presentatic

Example: Child One: "I am going on a trip. I will put shoes in my suitcase." Child Two: "I am going on a trip, I will put shoes and socks in my suitcase." Child Three: "I am going on a trip. I will put shoes and socks and a toothbrush in my suitcase." Etc.

d) Additional variations of memory games:

1) "The farmer went into the barn and saw a horse." (cow, pigs, etc.)

2) "The farmer's wife went into the garden to pick beans." (corn, beets, potatoes, etc.)

3) Animals in the barn. (Cut out the farm animals and back them with felt. Cut out the barn and paste it to a side of a small box. Pin box to flannel board. Farm animals are put in the box.

"I have a picture on the flannel board that is going to help us play a remembering game. I'm sure everyone recognizes the picture. Right! It is a barn. Now in this barn are some animal
If you listen you will know which animals are i
the barn because I am going to make some animal
sounds. I will make three or four sounds so do
say anything until I finish. Then I will ask s
one to tell me the names of the animals whose s
I made first, second, and third. If you are ri
the animals will come out of the barn. Ready?"

After a child has named the animals in the righ
sequence and the animals have come out of the b
another child could put them back into the barn
in the order in which they came out. Game coul
continue with another sequence of animals.

4) On my way to school. "Did you see anything spec
on your way to school this morning? Good! Many
you did. If you didn't see anything especially
interesting, suppose you think of something tha
you would like to have seen. Then let's play
remembering game, only this time we'll say, 'On
my way to school I saw (a squirrel, etc.).'"

5) I went to the zoo. "Remember how much fun we had when we visited the zoo? How many zoo animals can you name? Shall we play our remembering game using the zoo animals? This time we might say, 'I went to the zoo. I saw an elephant that ate peanuts.' The next person might say, 'I want to the zoo. I saw an elephant that ate peanuts and a lion that roared.'" Continue until the children have difficulty remembering the sequence.

6) Toy store. "If you could go to a toy store and buy a toy, what would you choose? I see everyone has something he would like to get. Would you like to play a game remembering toys the way we did before?"

7) Santa brought me. (Appropriate for the first day back from Christmas vacation) "Would you like to talk about the gifts you got for Christmas? Some of you told me about them before the bell rang, but I think the whole class would like to hear about them. Suppose we spend some time talking about your gifts and then it might be fun to play our remembering game. This time the first person will say, 'Santa brought me a __________.'"

8) Eating. "Can you remember what I want to eat? I'm so hungry I would like to have one glass of milk, two baloney sandwiches, three cookies, four cherries, and five pieces of candy." If the children can repeat this, keep adding items. Vary the game by letting one child begin and the next child repeat and add.

9) Vegetable soup. "How many of you boys and girls like vegetable soup? Can you name some of the vegetables that would be used in making vegetable soup? Good, you named quite a few. Now let's play a game to see how well you can remember the vegetables that are used in the soup. We will pla the game this way: The first person in Row 1 will say, 'I made some vegetable soup. In my soup I put some tomatoes.' The next person might say, 'I made some vegetable soup. In my soup I put some tomatoes and beans.' The next person would add one more vegetable. When we get to the end of Row 1 we'll have one pot of soup. Row 2 can start another pot."

10) Fruit salad. "How many of you boys and girls like fruit salad? Name some of the fruit that might be used. Do you remember how we played the vegetable soup game? Fine! We'll play the fruit salad game the same way." If the children don't remember, explain as in the game above.

B. Recall of More Abstract Numbers, Letters, and Rhythms

1. Numbers

a) Rote counting in proper sequence. Have the children learn how to count from one to ten or from ten to twenty. Three or four numbers will be the most that they can remember at a time, so one, two, and three should be taught, then four, five, and six, etc. Also, count the children at juice time.

b) Telephone numbers. Using two play telephones, have the children call each other. The teacher is the operator, and the children must call her in order to get the telephone numbers of their friends. The teache should attempt to give the more proficient children longer series to remember in order to challenge all equally. In order for the child to reach his friends, then, he must repeat the series correctly or he obtains a wrong number.

c) Elevator boy. One child is chosen as the elevator boy or girl. The other children are passengers on the elevator. Each child in turn names the floor at which he wants to get off. The elevator boy repeats these numbers and ends by saying, "Everybody off." Example: "First floor, second floor, tenth floor, thirteenth floor, everybody off." (Ideally, the children would give their numbers in order, but since this would be impossible, no harm is done if the elevator boy names floors in an order different from a numerical progression.)

d) Programmed tapes for the tape recorder. Partly for purposes of novelty and motivation and possibly for purpos of saving time and giving individual help, the teacher prepares memory drill tapes. These could be varied in content. Example: The teacher would record digits, beginning with only two numbers. A pause would follow during which the child or children listening would repeat the numbers. The number of digits would gradually increase. The same tape could be used for several sessions. For those children who have self-control this lesson could be done with a minimum of teacher control, thus freeing the teacher to work with another child on some other area of work. (Other drills, in addition to digits, could of course be recorded.)

e) Finger puppets and hand puppets. These are useful in motivating memory drill. The puppet then repeats the digit series, nonsense syllables, word list, etc. which the teacher presents.

2. Letters

Name Letters. The children might be taught to spell their names through repetition of this activity: "Tony, say these letters after me: T-O-N-Y."

3. Rhythms The repetition of rhythmic patterns (auditory-motor sequential). These patterns can be varied almost endlessly. (Short, long. Short, short, long, Long, short, long. etc.) The response may be made with coffee can drums, with rhythm sticks, with hand clapping.

C. Retail of Songs, Finger Plays, and Nursery Rhymes

1. Songs in Which the Sequence of Number Is Emphasized:
Ten Little Indians
Band of Angels
Three Crows

2. Songs in Which the Sequence of Items or Objects Is Emphasized:
Old MacDonald's Farm
The Farmer in the Dell
Sally's Hammer
The Twelve Days of Christmas
This Old Man
I Know an Old Lady
The Mulberry Bush

3. Finger Plays and Nursery Rhymes:
A Ball
Hands on Shoulder
Five Squirrels

Five Jack-o-Lanterns
Five Children
One, Two, Buckle My Shoe
One Potato, Two Potatoes
Five Fat Piggies:
    Five fat piggies, standing by the door,
    One ran away,
    And then there were four.
    Four fat piggies, asleep under a tree,
    One woke up, and then there were three.
    Three fat piggies see a cow that says "moo."
    One piggy jumped, and then there were two..
    Two fat piggies, having lots of fun,
    One got tired, and then there was one.
    One fat piggy, alone in the sun,
    He ran away, and then there were none.

D. Recall of Directions

1. Do and Tell The teacher whispers to a child a series of directions such as, "Go to the door, knock on it once, and come back to your seat. Now tell us what you did." The teacher should be sure the instructions are not too complicated and that the main factor involved is memory.

2. Touch What I Touch The teacher initiates the game by getting up, touching an item in the room, and then touching or calling on a child. "You touch what I touched; then touch something else; then call on another child. He will touch everything we touched, and something else." Help by asking: "What did J. touch; what did G. touch?" Etc.

E. Recall of Story Content

1. Now You Tell It Tell a story and have the children repeat the events in the order of their occurrence. This can be done with any story. The teacher can help the children by asking "What happened after that?" and "What comes next?"

2. Official Answerer. Select one child to sit up front with the teacher while a story is being read to the group: "Angie is going to listen to this story very carefully. She will listen for the names of the people in the story. She will remember what happens in the story. Then when the story is over, you can ask her some questions. If she can't remember, she might call on someone else to answer. So everyone lister very well."

F. Action Games

1. **Fruit Basket Upset** Children sit in a circle. Caller stands in the center. The children count off by names of four common fruits, such as apple, orange, banana, pear. The caller names two fruits. The children with that designation change places. During the change the caller tries to get in the circle on a chair. The child left without a chair becomes the caller. When the caller says "Fruit basket upset," all the children in the circle exchange places.

   There are many variations of this game which would permit it to fit into other areas of work. Examples:

   Children assigned numbers, repeating 1 through 4. Upset word - "Arithmetic."
   Children assigned names of four barnyard animals. Upset word - "Barnyard."
   Children assigned names of four jungle animals. Upset word - "Jungle."
   Children assigned names of four colors. Upset word - "Rainbow."
   Children assigned names of geometric shapes. Upset word - "Geometry."

2. **The Giant's Garden** Tell a story about a giant who needs children to help him weed his garden. Every child who walks past his house must repeat what the giant says to him or he has to help the giant. If the child can say it correctly, he can go on. Play this game with the children in a line. As they pass the giant (the teacher), he says three or four (however many that child has a good chance of completing) nonsense syllables such as ro-de-dum or fe-ti-rap and the child must say them back correctly. If he cannot, he goes to a part of the room designated as the garden to hoe weeds.

Chapter IX

VISUAL MOTOR SEQUENTIAL

A. Reproduction of Patterns Presented Visually

B. Memory Games with Visual Clues

IX. VISUAL MOTOR SEQUENTIAL

A. Reproduction of Patterns Presented Visually

1. Can You Make a Necklace Like Mine? Wooden bead stringing (preferably large one inch beads) according to a specified pattern. Color and bead shape (cylinder, sphere, square) make possible very intricate patterns. (2 red spheres, 1 blue cylinder, etc.)

2. Paper Chains Begin with a simple alternation (blue and white) and build up to more complicated patterns. For young children use pre-cut strips of paper or the cutting will dominate the activity instead of pattern reproduction. Transparent tape will give a sturdier end product than will paste.

3. Necklaces from Drinking Straws This is an art project which trains visual memory and also creates an end product in which the children delight. Materials needed: Drinking straws (colored or striped ones are best) are cut into one inch lengths. Colored paper is cut into one inch squares. Use blunt plastic needles and crochet thread for stringing. Only two colors should be introduced. A beginning necklace might consist of red and white striped straws and red and white one inch squares. The teacher sets the pattern. Example: a segment of straw, a red square, a segment of straw, a white square; repeat.

   If blue and white straws are added and blue squares, a more complicated pattern emerges: red striped straw, red square, blue striped straw, blue square. Repeat. These chains may be used for room decorations (red and green for Christmas, red and white for Valentine's Day, etc.) or tied off in individual necklaces which the children take home.

4. Calendar Recall Number squares are cut from an old calendar. An assortment for each child is kept in a separate envelope. The teacher arranges numbers in a random order and allows the children to look at them. The numbers are then covered and the children try to arrange their numbers in the same order. A child does not need to be able to read the numbers to play this game. The teacher would begin using only two or three numbers and, hopefully, increase the number of digits.

5. Poker Chip Patterns Poker chips are useful in pattern reproduction because there is no element of reversibility. In early exercises allow the children to look at the

pattern and duplicate it. Later, allow the children to look at the pattern; then, cover the pattern with a sheet of cardboard and have the children reproduce the pattern. The children may take turns making patterns for each other to copy. When the children have completed the pattern, a variation may be introduced: "I am coming around the table and when I come to you, close your eyes. When your eyes are closed, I may take one of your chips, add one, or do nothing at all. You then look and tell me what I did." (The child then re-makes his pattern to the original design.)

6. Other Materials for Patterns

a) Design Cubes in Wooden Box. (Creative Playthings, Inc. Princeton, New Jersey, 08540.) Endless colorful patterns emerge as these blocks are combined, either following suggested "layout" or creating one's own design. Cubes have four one-color surfaces, two two-color surfaces. Wooden cubes. 1 1/6".
T746 (5 lbs.) $4.95

b) Hexagonal Design Tiles. (Creative Playthings, Inc. Princeton, New Jersey, 08540.) Using a few or all the tiles, arranging them one way or another, no matter how they're combined, children will make wonderful and colorful patterns. 100 plastic tiles in transparent tube container.
R071 (1 lb.) $2.50

c) Rubber Parquetry. (Creative Playthings, Inc. Princeton, New Jersey 08540.) A very popular media with the children. The large, rubber triangles are easy to handle and the circle inset (removable) permits greater variation in design.

7. Miniature Scenes. (An assortment of miniatures is available from Creative Playthings, Inc. Princeton, New Jersey, 08540.) At first very simple scenes may be copied by the children: an animal between two trees, for example. Later, arrange a scene, as on a farm. (A barn, fences, farm animals, people.) Start simply with a few items, adding new items as the children become more competent. "Here is a farm scene. Look at it carefully to see where everything is. Is the calf near the mother cow or is it near the barn? When you shut your eyes, I'm going to change everything around, and then you will put things back the way they are now. Are you ready? All right, close your eyes..... Now open them. Can you put things back the way they were?"

8. Flash A three-color flashlight is used to create a color pattern (red, red, white, green, etc.). The child reproduces this pattern.

   Three-Color Flashlight. (Creative Playthings, Inc. Princeton, New Jersey, 18540.) A flick of its switch, and this extra special flashlight signals red or green. Another flick, and it flashes its regular white light, penetrating up to 350'. Uses two regular flashlight batteries (not included).
   Q476 (8 oz.) $1.00

9. Memory Arithmetic Game (Milton Bradley, Springfield, Mass., 01101.) No.7005 Each $1.00

   This game follows the pattern of most parlor games of memory or concentration. It is not necessary to be able to read the numbers in order to play. The abstract dot patterns for the numbers and the illustrations are particularly useful. For pre-schoolers one would not use the entire set to begin with. (Probably 1-5 would suffice.)

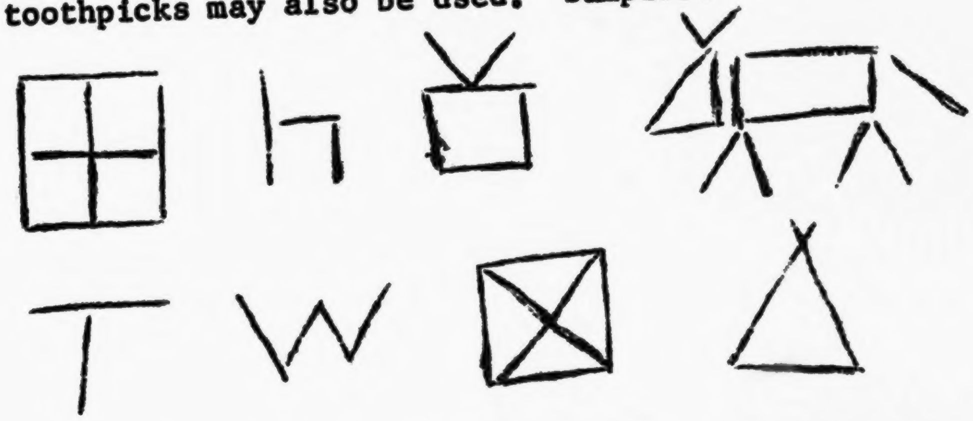
10. Peg Boards The plastic peg board and pegs described below are very useful in setting up patterns which the children can reproduce. Ideally each child at the table would have his own peg board. The teacher illustrates a pattern (an outline of a square done in red pegs, for example) and the children reproduce this pattern on their own boards.

    Plastic Peg Board and 100 Plastic Pegs. (Milton Bradley, Springfield, Mass., 01101.) Features sturdy 2-piece white plastic peg board. 6" x 6" cover with 100 peg holes fits over fluted tray for peg storage.
    No. 7615 $2.50

11. The House That Jack Built (Arrco Playing Cards, Chicago, Illinois, 29¢.) This game contain four sets of ten cards

which illustrate the nursery rhyme "This Is the House That Jack Built." At first the cards would have to be arranged by the four children as the teacher reads the poem. Later, they could arrange the cards themselves or follow an old maid format to see who could complete his series first.

12. Tooth Pick Pictures Tooth picks can be used to create interesting patterns for children to reproduce. Colored toothpicks may also be used. Samples:



Popsickle sticks (purchased in large quantities) may be used for a similar exercise. The sticks are larger than the toothpicks and require less coordination for using them.

13. Alphabet Memory The letter dice from a game like Scribbage can be used to form a random pattern. Children need not be able to identify the letters to play the game. One child throws the letter dice (3 or 4 at first). This random throw is examined by the second child. He is now given the dice and asked to reproduce this throw by arranging the dice as they were. The number of letter dice may be gradually increased.

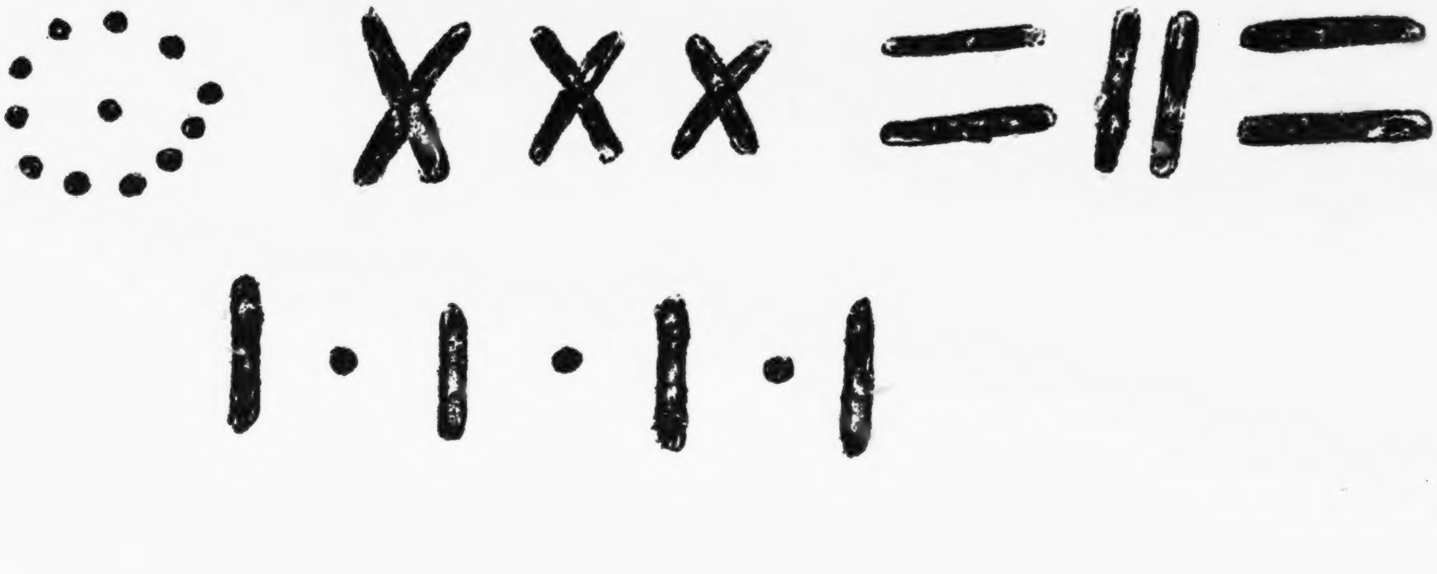
A similar exercise which children enjoy is to arrange each child's name in front of him with letter cut-outs, preferably pasted on a cardboard rectangle. "Look at the letters. They spell your name. Now I'm going to give you more letters. You try to spell your name by putting them the way these are." At first, allow the children to copy from the sample frame. Later, encourage them to arrange the letters without a copy before them. (Cardboard lette cutouts available from art supply catalogs and school catalogs.)

14. Geometric Shapes to Pattern Prepare a large assortment of geometric shapes from colored posterboard. These are an inexpensive set to use for creating patterns (a green triangle, a red circle, a green triangle, a red

circle, repeat, etc.). It is interesting to note that it is almost impossible to prevent the children from going on to assemble these shapes into meaningful pictures: a clown, a house, a wagon, etc. It is important to allow the children some time for free play with almost all of the pattern-making materials.

15. Building Rods A variety of block sets may be used for these exercises. The Cuisenaire Rods are useful because of their size and color variables. (Cuisenaire Company of America, Inc., 235 East 50th Street, New York 22, N.Y.) The rods may be used to create visual patterns of all sorts. Of course, there is the typical Cuisenaire staircase, but bridges, trains, cubes, fences may be used as patterns for the children to copy. There are almost endless variations in rod "play." "Look at the order of these rods. See how they go from a short step to a tall one. Now I'm going to mix them up and have you build the steps the same way they were." Or, arrange three or four blocks in a design. "Look at the way this building is made. The longest block is on the bottom and the two short ones are on top." (Take the blocks apart.) "Now, you build the same thing." Later, reverse the design, placing the short blocks on the bottom and the long block on the top, etc.

16. Pipe Cleaner Prints This is a pattern project which produces a take-home art product. The prints may be used for cards or announcements which the children take home or as pictures. Materials needed: pipe cleaners, poster paint, a somewhat absorbent paper. The end of the pipe cleaner may be used to make a dot or it may be bent in a number of ways (leaving a straight end for a handle) to create basic shapes from which to make patterns. See sample patterns:



17. Find the Missing Step Cans, dowels, or blocks are lined up to form a staircase. Tell the children to look at the staircase and then close their eyes. Remove one item and close the gap. Have the children open their eyes. Can the child find where the extra item originally was? Can he make a space for it and insert it into its proper place?

18. Flannel Board Patterns Geometric shapes, letters, numerals, animal shapes, etc. may be presented on the flannel board in a series which the children are asked to reproduce. A simple story line may be added to heighten interest in the exercise. "These are the animals I saw in the forest: a white rabbit, a blue bird, a yellow butterfly, and another white rabbit." Or, "Here is a clothes line. I am hanging out my wash. Here is a pair of socks, a shirt, a pair of blue jeans." (Remove items from the flannel board.) "Now, can you hang these clothes back on the line just like they were before?"

B. Memory Games with Visual Clues

1. A Color Game This game would be initiated with three very different shades of a color. Spread the shades of each color to be used (one for each child in a small group) in front of the child. "We are going to play a remembering game. Pick out a color bar from your pile. Study it very carefully and then put it down. Go across the room to that table where you will find another pile of the same colors. Find the shade that you looked at over here and bring it back. Put the two together. If they match, look at another shade very carefully and then go find that one. When you have matched all the shades, arrange them from the dark color to the light color." (Of course, all these directions would not be given at one time.)

2. Let's Take a Trip Use actual materials. "I'm going to pack my suitcase because I'm going on a trip. I'm going to take socks, a pair of shoes, a hat." Allow the children to see what you put into the suitcase and to hear you name the items. Close the suitcase and ask the children in turn if they remember what you packed. Begin with only two or three items. Then begin to add items. "I forgot my toothbrush. Now I have socks, a pair of shoes, a hat and a toothbrush." Again, ask the children what you packed. Attempt to lengthen the list on subsequent days.

3. Variation on a Lotto Game Pass out the master cards from a lotto game. "Study the pictures on your card very carefully because you will have to remember what

is on there without looking. Try to look for things that will help you remember. Do you have all fruits? All animals? Ready? Turn your card over now so that you can't see the pictures. When I hold up each small card, tell me if it belongs to your big card. Who has a red wagon?" Etc. (Children may need to turn over their cards from time to time for verification.)

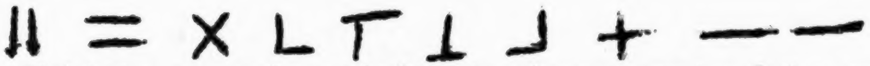
4. Touch Explain this game to the children. "I am going to point to a child. That child will jump up, go across the room and touch something - maybe the piano, maybe the table, a book, or anything in this room. Then he sits down and I will point to another child. That child will go touch the same thing the first child touched....and then touch one more thing before sitting down. The third child will have to remember both things that were touched before and touch them and then think of something to touch for himself before sitting down. Now watch closely. Are you ready?" (The teacher points to the 1st child, repeating directions as necessary until children can remember.)

   A more complicated form of this game can be played by including touching the children who set the touch pattern. As follows: Mary touches the table. John touches Mary, and then touches the table and then the pencil sharpener. Jane touches Mary and then the table and then John and then the pencil sharpener and then the floor. Harry touches Mary and then the table and then John and then the pencil sharpener and then Jane and then the floor and then a chair, etc. (This game sounds more difficult than it actually is.)

5. Body Touch Parts of the body are touched in a lengthening sequence. Head, knee, foot, ear, etc. (There are a number of children's songs which can be used for this type of activity and would introduce an auditory-vocal situation.) Children may perform this activity by standing in a line and having each child add a new body part to touch or by having the teacher act as a leader. After the teacher has performed the entire sequence (4 or 5 touches to begin with) the children would perform the complete sequence.

6. Pencil Drill Unsharpened pencils or rhythm sticks can be used to perform a visual drill. The leader makes a pattern with her sticks and the children follow with theirs. At first the children will be able to do only one pattern at a time. Later they may be able to do several in sequence.

Sample patterns:



This is a good activity to incorporate into music time.

7. Do As I Do The game is played much like the traditional game of Follow the Leader, except that all movements must be repeated each time a new movement is introduced. The original order must be kept.
   a. Raise your hand.
   b. Raise your hand and tap your head.
   c. Raise your hand and tap your head and clap your hands.
   d. Raise your hand and tap your head and clap your hands and jump.

This game may be played with no verbal commands. The children observe the teacher or leader or do as she does without being told.

8. People Patterns Place two children in a pattern: one behind the other, one to the left of the other, etc. Have the other children study the position. Tell them you are going to change the two around and they must remember where they were when they first saw them. The children then close their eyes. Change the position of the two children and have the others open their eyes. Choose a child to rearrange the children as they were before. Gradually the number of children used in the pattern may be increased. A variation may be used: Arrange five children in a line. One child leaves the room after studying the line. Switch the children around or remove a child from the line or add a child to the line. The "guesser" is asked to come back into the room and tell how the line has changed. He then rearranges the original line.

9. What Is Missing? There are many variations which may be used in this memory game.

   a) A miscellaneous collection is presented to the children for their examination (a key, a comb, a pencil, a crayon, etc.). After the children have time to observe the collection, one item is removed when the children have closed their eyes. At their second observation, the children are asked to identify the missing object. An object might be added, and the children asked to tell how the collection has changed now. From time to time the items in the collection would be changed.

b) Several colored blocks or beads are placed on the table. The children pretend they are pieces of candy. The children then close their eyes. The teacher taps one child who opens his eyes and "eats" a piece of candy (holds it in his fist). Then all the children are told to open their eyes and tell which piece of candy has been eaten (the red one, the green one, etc.). For added fun, the children then guess which child"ate" the piece of candy.

c) The children are seated in a circle and close their eyes. The teacher taps two or three children and they are to leave the room. The others then open their eyes and name the missing children, if they can. They should also tell where they were sitting in the circle. The children who left are called back in and take their original places in the circle.

d) Empty grocery containers are arranged in a line on the table. (A story line explains that this is what we are going to buy at the store.) The children then close their eyes while an item is removed. When they open their eyes, they are to identify the missing item. Again, more than one item may be removed or an item may be added to the assortment.

e) Doll furniture is arranged in a room. (A shoe box can serve as a "room.") One child leaves the room and one or two pieces of furniture are rearranged. When the child returns, he is to identify the changes and rearrange the furniture. Again, items of furniture may be added or removed from those in the room to change the response.

Chapter X

VISUAL CLOSURE

X. VISUAL CLOSURE.

1. Shape Puzzles There are many puzzles now available where each puzzle piece represents a complete shape. These would qualify as a closure exercise. A representative sample of this material is included below.

   a) Fit a Space. (Childcraft Equipment Co., Inc. P.O. Box 280, Madison Square Station, New York, New York, 10010. $3.00.) Forty-eight pieces in twelve different shapes fit into 16 colorful rubber discs, 3 3/4" in diameter.

   b) Puzzle Blocks. (Childcraft Equipment Co., Inc. P.O. Box 280, Madison Square Station, New York, New York, 10010. $2.00.) Building blocks with three dimensional inserts in familiar shapes (truck, horse, cat, girl) that can be fitted into the blocks or can stand alone.

   c) Push-Out Play Cards. (H-G Toys, Harett-Gilmar, Inc. Far Rockaway, New York. $1.00.) Set contains heavy cardboard squares with a push-out animal (cow, dog, lamb, etc.) and the push-out letters which spell its name. The child does not need to know the names of letters or the words in order to do this puzzle. The letters are about an inch high and can be put in the proper place by outline shape alone.

   d) Animal Fun. (Milton Bradley, Springfield, Massachusetts, 01101) This set contains 8 die-cut zoo animals which fit into cards which show an appropriate jungle scene. The cut-out letters are provided and the children may spell out the name of each animal.

      No.4516 $1.00

   e) Lift-out Object Puzzles. A dog, a chicken, a tree, a shoe, a boat, etc. They are all made of 5/16" plywood. A brass knob on each facilitates removing pieces from their wooden background plaque. Once removed, they can be lined up in the grooved board. Plaque is 8" x 11". (Creative Playthings Inc., Princeton, New Jersey, 18540.)

      No. T747 $2.50

f) Shape Sorting Box. There are five differently shaped holes in the top of this box. There are five brightly painted, differently shaped wooden blocks (and three of each of these) to be dropped into the box through the holes. Each hole accepts only its corresponding shape. It is great fun to sort and fit and finally succeed. Solidly built of ½" birch; clear lacquer finish; orange top hinged for ready access. Lock-corner construction insures long life. 7" x 7" x 7". (Creative Playthings Inc., Princeton, New Jersey, 18540.)
Q949 (3 lbs.) $4.50

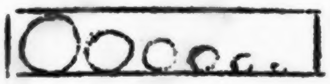
g) Lift-out Transportation Puzzle. This varied assortment of cars, trucks, etc. is made of 5/16" plywood and equipped with knobs for removing and re-fitting each piece. Plaque is 12" x 8½". (Creative Playthings Inc., Princeton, New Jersey, 18540.)
T736 (1 lb., 8 oz.) $2.50

h) Rubber Stand-up Puzzles. Each piece in these puzzles is a complete unit in itself. Each piece will stand by itself and may be used as an individual play figure, apart from the puzzle. Properly replaced in its wooden frame, it stands out in slight relief, adding tactile interest. Frames are wood; 4½" x 11½" die-cut figures are rubber. (Creative Playthings, Inc., Princeton, New Jersey, 18540.)

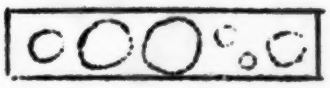
Transportation	T501 (1 lb.)	$1.95
Animals	T503 (1 lb.)	$1.95
Family	T504 (1 lb.)	$1.95
Set of 3 Puzzles	Q746 (3 lbs.)	$5.50

i) Graded Circles, Squares, Triangles. A form board for learning to distinguish shapes and relative sizes. Forms are made of rubber, in colors, and fit into corresponding indentations in sturdy wooden slide-cover box. Placing shapes where they belong is an exercise in discrimination, as well as orderliness. (Creative Playthings, Inc., Princeton, New Jersey, 18540.)
N100 (3 lbs.) $3.50

2. Geometric Shape Puzzles If volunteer workers and a woodworking shop are available, the following set of geometric shape puzzles would provide a series of gradually increasing difficulty.

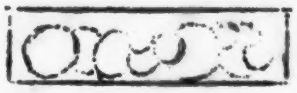


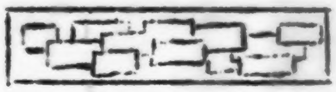
The first puzzle consists of a single geometric shape which varies in size in a descending order.



The second puzzle presents the geometric shape mixed in size It might be helpful to use a different color for each size.

The third set would present geometric shapes mixed in size and color and presented in an overlapping format.





Finally, different geometric shapes would be combined in the same puzzle.

3. Domino Puzzles Each domino-sized card pictures a body of one animal at one end, the head of another at the other. Children select matching cards, building in domino fashion. Each card also has two alphabet letters, in sequence. Matching cards continue the correct sequence of letters, a self-correcting device. Lots of fun alone or with others, and excellent pattern learning and reading readiness material. (Creative Playthings, Inc., Princeton, New Jersey, 18540.)
R017 (8 oz.) $1.95

After the puzzle has been completed, there are many vocal activities which may follow: Children imitate the various animal sounds; children name the animals formed; children tell where the animals live and what they might eat; etc.

4. Mix 'n Match These cards picture various circus animals and characters (clown, barker, seal, lion, etc.). Each card is divided into thirds; the head is on one card, the upper body is on the second card, and the feet are on the third card. Children find the proper match, either alone or as a small group game. (Arrco Playing Cards, Chicago, Illinois, 29¢.)

5. Go-Together Animal Cards Playing card size (2 3/8" x 3½"). Each of these 24 cards pictures an animal in bright colors, its name boldly printed. Each card is cut in half; the game is to match the top of each animal with its correct bottom half. Excellent for use alone as well as in small group play. (Creative Playthings, Inc., Princeton, New Jersey, 18540.)
A308 (6 oz.) $1.00

Home-made variations on this game provide opportunities for further drill. For example: partial pictures of common animals are pasted on cardboard (pig, fish, dog, sheep, etc.). The teacher begins in an informal manner: "Boys and girls, this morning we are going to play a 'Name the Animal' game. You know the names of many animals, don't you? If I showed you a picture of a cow, you would say right away, 'That is a cow.' Now, suppose I show you a picture of part of a cow. Do you think you would still know it was a cow? Would you like to try? I will give each of you a picture of part of an animal. When you can say the name of your animal, raise your hand."

Pictures of "jumbled" animals may be prepared from magazine pictur may be sketched on the blackboard, or may be drawn and mimeographe (The head of an elephant and the body of a zebra, the head of a rabbit and the body of a dog, a cat with a fish's tail, etc.) Th teacher says, "Here is a funny looking animal. He has a head of one animal and the body of another animal. Who can tell me the animals that made up this one? Which animal has a head like this?" Etc.

7. Animal Talk (A Mattel toy available at toy counters anywhere.) The puzzle pieces for the twelve animals used in this game make a useful closure exercise. Each animal is divided into fourths and printed on four cardboard squares. When the four squares are correctly assembled, a complete animal emerges. The game would not be used according to the manufacturer's directions.

8. Etch-a-Sketch (Available from Sears and Penney's as well as most department stores.) Young children cannot create realistic picture but can create interesting abstractions in which pictures "can be seen." A good closure exercise as well as good practice in motor coordination and left and right identification. Just turn the knob to create any picture or design you want. Erases in a second when turned upside down. Durable plastic construction, with plasti case. 9½ x 7 3/4 inches.
[illegible] $2.69

9. Sewing Cards These cards are available on cardboard or on pressed board from Creative Playthings, Inc. as well as from dime stores and toy catalogs. This activity may be used as an introduction to dot-to-dot-drawing which is a closure activity on a more refined level.

10. Dot-to-Dot Materials Simple dot-to-dot materials may be prepared by the teacher to present any material currently being studied (fruits, geometric shapes, vehicles, animals, etc.). The drawings should be simple in outline and large in format so that coloring them is not an impossible or tedious task for the children. Most of the commercially available dot-to-dot material is too difficult for pre-school children.

11. Finger Painting These constantly changing pictures are an art activity which encourages the development of visual closure. ((Liquid starch and powder poster paint is an effective and inexpensive method of finger painting. The commercially prepared finger paints are rather expensive.) Regular finger paint paper or glossy shelf paper may be used.

12. Eye Dropper Paintings The finished product of this art activit provides a visual closure experiment. Materials needed: five eye droppers, poster paint in small jars (2 to 5 colors depending upon control of children), absorbent paper. The paper is folded in half and opened flat. The children drop paint in a random pattern on the right-hand half of the paper only. Care should be taken to get some paint near the fold line. After several colors and a generous amount of paint have been used, the left-hand half of the paper is folded over and the top surface gently rubbed flat. When the picture is re-opened, the wet right-hand side will have printed on the dry left-hand side. The results are interesting; most frequently produced picture is a giant butterfly, but others emerge.

13. String Paintings The finished product of this art activity provides a visual closure test. Materials needed: pieces of string, poster paint in small jars, newsprint. The paper is folded in half and opened flat. The children drop the pieces of string into the jars of paint, keeping a clean tag end for removing the string. After the strings have absorbed paint, they are pulled from the jar and placed in a random pattern on the right-hand side of the paper. The left-hand half of the paper is folded over and a pile of books is placed on top Now the tag ends of the string are pulled out. When the picture is re-opened, the wet right-hand side will have printed on the dry left-hand side. The colored strings will have spread the paint and will have tangled with each other to produce rather complicated and well shaped pictures. Flying birds are a common result, but many other forms emerge.

14. Put-Together Pictures The children are given the component parts to make a person or animal. For pre-schoolers these pieces must usually be pre-cut. Without seeing a completed picture, the children assemble the parts in the correct fashio The pieces may be pasted on a paper or put together with brads Exercises might involve assembling a man: head, body, arms, legs; a house: roof, sides, windows, chimney, door; the parts of a plant, a rabbit, etc. Ask the child, "Can you tell me what this is now...before you put it together? What would thi be?" (pointing to a piece) "Put it together and see if you a right."

15. Geometric Pictures Children are given an assortment of pre-cut geometric shapes in a variety of sizes and colors. They are asked to make pictures from these (a person, a house, a flower, etc.). Crayons may be used to provide detail if the child wishes. Interesting variations are possible: shapes cut from black add white paper are pasted on colored paper, producing an abstract or silhouette effect; shapes cut from

colored paper are pasted on black paper for a rather dramatic background. This exercise may also be performed at the felt board with geometric felts or on a pounding board with geometric wooden pieces and a hammer and nails (commercially available anywhere at toy counters).

16. Shadow Pictures A zoom-lite may be used to cast shadow pictures on a wall, or the shadows may be cast by using a lamp and one's hand or simple objects for shadow identification. The zoom-lite is a flashlight with picture discs which may be inserted under the lens and focused for in-room distances. Five picture discs and five blank discs for original drawings are included. The zoom-lite requires 2 regular flashlight batteries. 7" long. (Creative Playthings, Inc., Princeton, New Jersey, 18540.) Q829 (14 oz.) $1.50

A follow-up exercise could be made by collecting pictures of simple objects such as a ball, a tree, a cube, etc. and making shadows to fit these. "See if you can put the right thing with its shadow."

17. Shadow Lotto (Childcraft Equipment Co., Inc. P.O.Box 280, Madison Square Station, New York, New York, 10010. $1.00.) This game presents all pictures in black silhouette which enhances the closure aspect of the game. Played in typical lotto fashion.

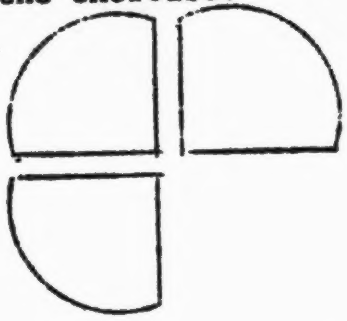
18. Gingerbread Man (Available at most toy counters.) This game contains a plastic gingerbread man which is assembled in six pieces: head, body, four appendages. A spinner accompanies the game and children must spin for the proper piece. The game may be played alone without the spinner or two children may play with the spinner to see which child can complete his man first by obtaining the requisite parts. (Game contains enough pieces for creating two gingerbread men.)

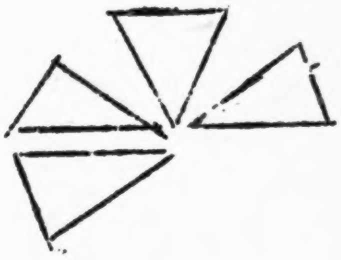
19. Commercial Games Simple, non-reading games are available which involve the completion of a picture to finish the game.

Goat. Goat is a beginner's card game. The playing cards are sections of large, colorful animal illustrations. Players trade cards from their hands and pair them up to complete the pictures. The unlucky player who gets stuck with the goat card loses the game. (Milton Bradley Co., Springfield, Mass. 01101.) No. 7009 $1.50

Raggedy Ann (Milton Bradley Co., Springfield, Mass. 01101.) Players complete Raggedy Ann's picture, using cards obtained by matching pictures on spinner with those on playing board.
No. 4809 $1.00

20. Finishing Patterns Suitable materials: rubber or wooden parquetry, fractional pies, plastic pegs and peg boards, felt board pieces, building blocks. The teacher presents an incomplete form and the children are asked what piece or pieces are needed to finish the pattern. After the children have verbalized their decision, they choose the necessary piece or pieces to check their answer and to determine whether or not they have actually "closed" the pattern. A color pattern may be superimposed upon the geometric pattern to increase the difficulty of the exercise.





Building blocks may be used to present partial circles, squares or rectangles. Extra blocks should be available for the children. "Look at this shape. It isn't quite finished. What doe it remind you of? Can you finish it?"

21. Incomplete Pictures Mimeographed sheets or blackboard drawings may be used to present a variety of incomplete pictures. "Here is a row of heads. Something is missing from each one. Some have no nose, some have no ears, some have no eyes. What is missing on this one? Yes, draw a mouth on it." Etc.

"Twin" pictures may be made of many subjects. The children examine the complete "twin" and then look at the incomplete "twin" to determine what is missing. On simple pictures the missing items may be drawn in; on complicated drawings the response is only verbal. Later, the "twin" idea may be eliminated and the children are presented with the incomplete picture only--a dog minus his ears, a house without a door, etc The children supply the missing elements.

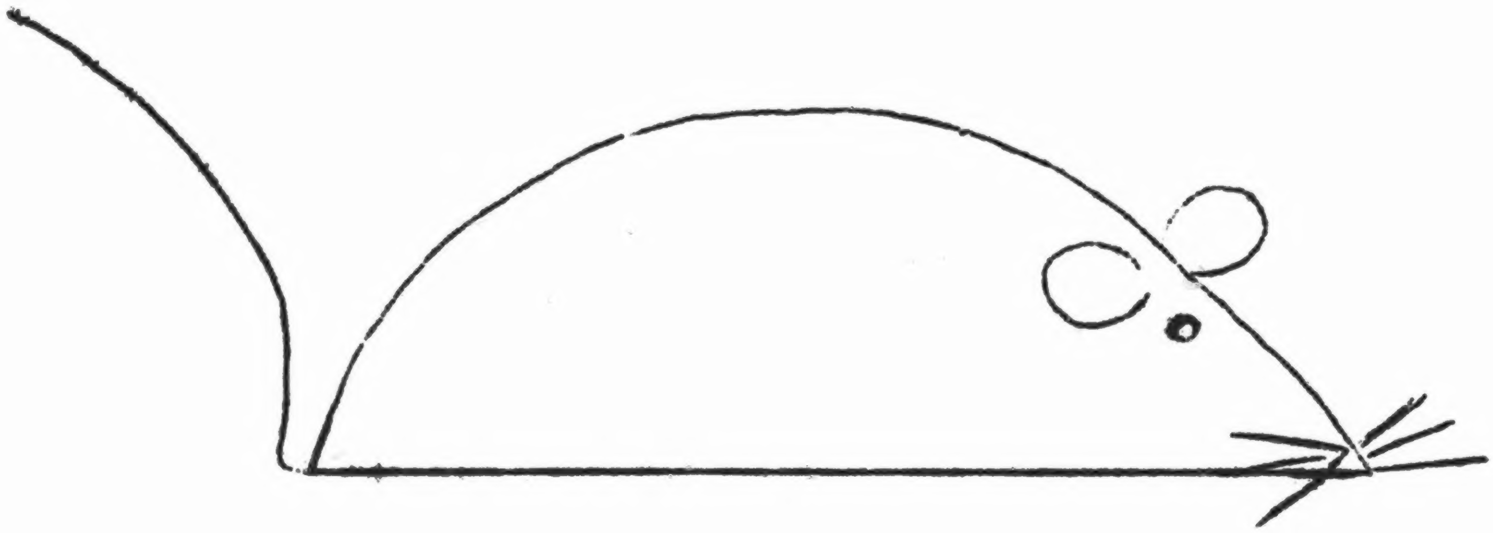
Mimeographed sheets or blackboard drawings which show the incomplete picture and also show the element necessary for its completion may be used for matching exercises: a bucket withou a handle, half a pair of scissors, a car with a missing wheel, a baby bottle without a nipple, etc. On the other half of the sheet are found the missing elements: a handle, half a pai of scissors, a nipple, a wheel, etc. The children draw a line from the car to its wheel, etc.

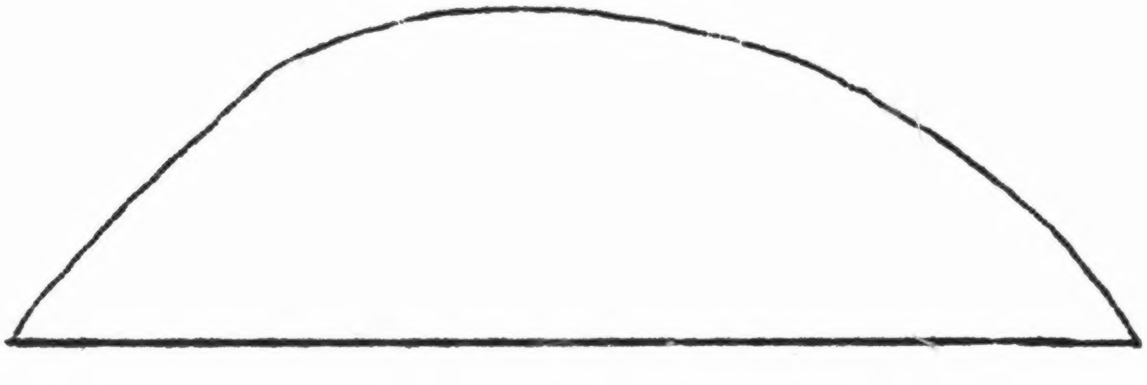
22. Draw a Picture from a Basic Form A basic form is drawn on the blackboard and additions are made to that form until a picture emerges (a fish from an oval). The children observe the drawing and are asked to identify the picture as soon as they can. Later they are given the same basic shape and asked to draw a similar picture. See samples on the following page. (Others: balloons from circles, a house from a square, etc.)

Later, a more demanding exercies is to present the children with a page showing a shape of varying sizes in different positions on the paper. For example: a number of circles are drawn on a large sheet of paper; a small circle on top of a large one, a large circle with two small circles inside of it three small circles in a row, etc. The children are asked to see what things they can make out of these circles with their crayons. (A snowman, buttons, a face, a flower, an apple, etc The same format may be used with ovals, triangles, squares, an rectangles.

23. The Frostig Program of Visual Perception A number of the practice sheets in this set may be used for closure drill. See Teacher's Manual for teaching suggestions.

24. Kaleidescopes and Teleidescopes A kaleidoscope with an empty head can be purchased at most dime stores. An assortment of small objects is shown to the children: a paper clip, a button a rubber band, a bit of colored paper, a snap, etc. After the children have examined and identified the objects, they are removed from sight. The teacher places one of these objects in the empty kaleidescope head and the children try to guess what object they are seeing through the kaleidescope. The results are quite amazing and not so simple to identify as one would suppose. When the children are able to identify one object correctly, two or three may be added. Three objects produces a rather complicated abstraction when seen through the prism of a kaleidescope. The Teleidescope (available from Creative Playthings) produces the same results but without the factor of control. With a teleidescope the child may focus on any object in the room and see it in a prismatic effect. Again, the patterns are striking and the identificati is not simple--even when the child knows what he is looking at.





DRAW A MOUSE

25. Scribble Pictures and Hidden Pictures The teacher can create scribble pictures which can be mimeographed for the children t to mark. If the drawing is large enough, the children may color in the object they have identified. See sample page which follows: "Hidden Butterflies". A more abstract scribble can be made by having the teacher (later the child) scribble an open-type of line pattern with a black dri-mark or with a heavy black crayon line. The child then colors in the segments. A "stained glass" results; but with some care on the part of the scribbling teacher, basic shapes or literal picture can also emerge. The child can be told what to look for in his scribble. ("Find three hidden balloons in this scribble and color them red." "Find a banana in this scribble and colc it yellow.")

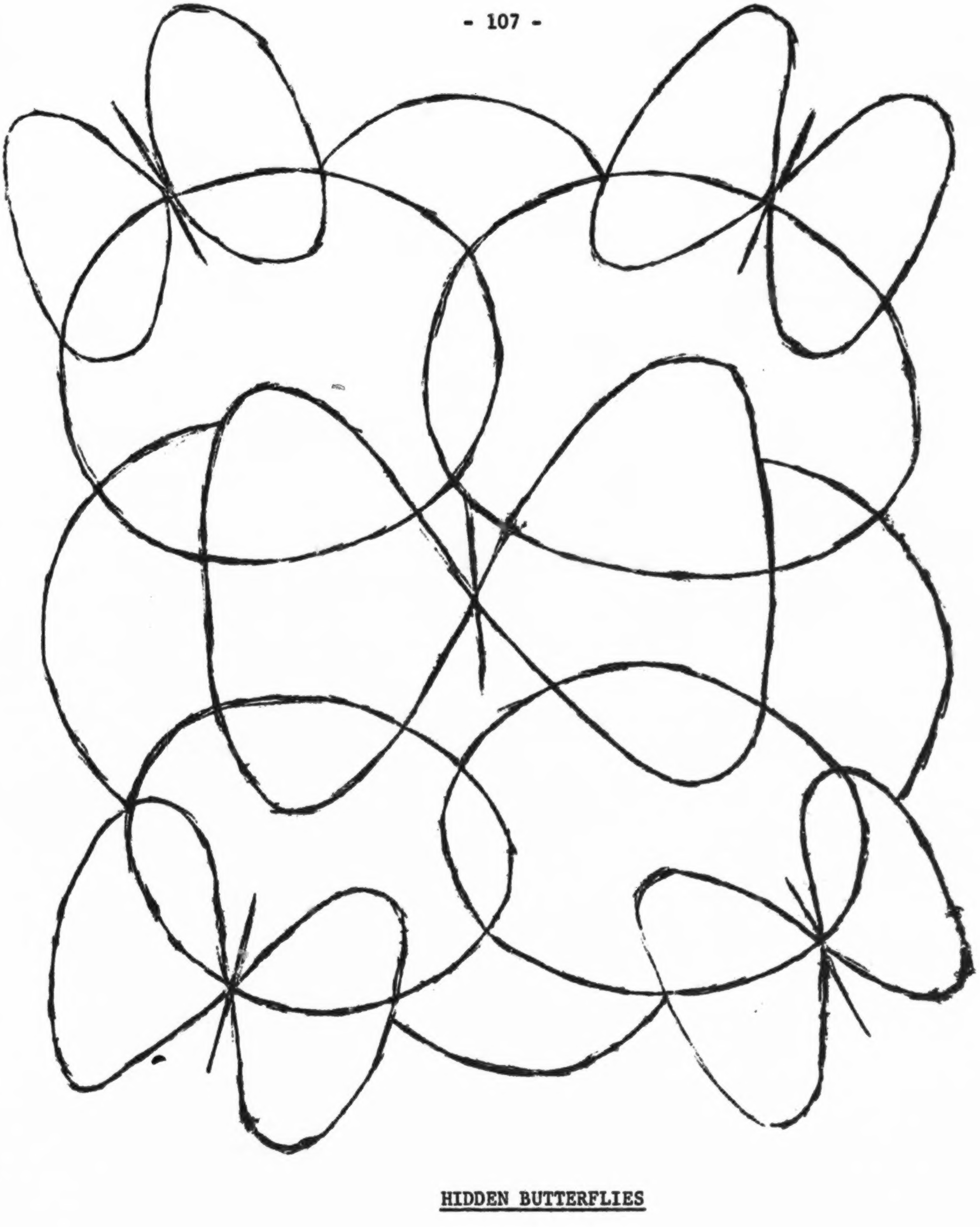
    Similar pictures may be made by asking the children to color each space which has a dot in it. Examples: a bird emerges among the leaves when each space with a dot in it is colored blue and each space without a dot is colored green; a turtle emerges among the stones when each space without a dot is colored brown.

    Superimposed figures may be used in this fashion. For example, geometric shapes may be superimposed - overlapping circle, square, and triangle. The child is asked to find a specific shape and outline it or color it with his crayon. Pictures of superimposed objects may also be used. Again, th children may trace the objects requested and later color thes objects solidly. (Similar exercises are available in the Frostig Program.)

26. Paperplate Faces Each child is given a paperplate to repres a face and cut-out features for this face. The children are required to paste the features appropriately on the face. Fo young children, the mouth or an eye might be pre-pasted to help orient the child.

27. Composite Blackboard Drawing The teacher begins a drawing on the board and each child adds a detail to help complete the picture. "We are going to draw a person on the board today. I'll make the head. Then it's Dick's turn to put on somethin that a person must have." Etc. Houses are another subject popular for composite drawings.

28. What Is It? Magazine pictures of relatively simple objects are cut up and pasted in a random fashion on shirt cardboards (a telephone, an automobile, an airplane, a boy on a bike). The child looks at the pieces and is asked to identify the picture. He does not have the opportunity to arrange the pieces since they are pasted down in their "broken" fashion.



HIDDEN BUTTERFLIES

29. Half and Half Simple cut-outs are prepared by the teacher. The child is asked to identify the object before it is unfolded. "I am going to cut a shape out of this paper. You watch and see if you can guess what shape it will be. You can't see all of it yet, but what do you think it will be?" Then open the fold so the children may confirm their answers. Give the shape to the child who guessed correctly first. Help all children so that each child will have some shapes.